DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

March 6, 1958

Memorandum

To: Kingfield Chamberlaing Statistics Branch
Division of Operation Contract and Statistics

From: Director, Division of Base Metals

Subject: Report of the Semi-Annual Reports of Certified Projects for the Period July 1, 1957 thru December 31, 1957

The following projects were inactive during the cited period.

Locket No.	Contract No.	Name
DMA-2073	Idm-E245	Cuba Mining Company
DMA-2165	Idm-E312	Silver Dual Mines Company
DMA-2184	Idm-E342	Mayer and Thiede Mining Co.
DMA-2213	Idm-E294	Elmer Anderlin
DMA-2234	Idm-E317	Dan Knight Mining Lease, Inc.
DMA-2257	Idm-E442	Walker Corporation
DMA-2358	Idm-E271	Belle Aldrich Gold Mines, Inc.
DMA-2399	Idm-E332	The Eagle Fisher Company
DMA-2482	Idm-E409	Raymond Combined Mines Company
DMA-2495	Idm-E331	Copper Hill Mine Venutre, R.S. Fitzgerald
DMA-2713	Idm-E366	Robert F. Blum
DMA-2843	Idm-E615	Richard E. Chilson
DMA-2929	Idm-E587	Grandview Mines
DMA-2991	Idm-E558	Shenandoah-Dives Mining Company
DMA-3510	Idm-E755	Paul Gills
DMA-3428	Idm-E774	Mt. Wheeler Mines, Inc.

W. W. Griswold

8623

DEFENSE MINERALS EXPLORATION ADMINISTRATION
For the period January 1 - June 30, 1957

Base Metals Division Date February 13, 1958

Semi-Annual Report - Certified Project Date

DMEA No. 2399 Operator Eagle - Picher Company Contract No. Idm-E 339

Ore Reserves

Ore Estimates	Tons	Analysis
Original (DMEA)	202,000	Zn. 6.02; Pb. .11
Increase (Operator)		
Total		
Decrease (Production)		
Net Available		

Investment

Shafts			Winzes			Drifts & Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

Raises			Drilling			Rehabilitation	
Size	Feet	Cost	Type & Size	Feet	Cost	Description	Cost

Facilities

Mine Plant		Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

Remarks

W. R. Griswold/er

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REQUEST FOR INFORMATION
FROM OPERATOR ON CERTIFIED PROJECT
AND PROJECT UNDER ROYALTY AGREEMENT

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

From: ACTING Field Officer, OME
Region IV
Washington 25, D. C.

Date: August 29, 1960

Concerning:
Docket No. DMEA-2399
Property Project No. 1
Eagle-Picher Company
Location Grant & Lafayette Counties
Wisconsin
Contract Idm-E339

Eagle-Picher Company
First National Bank Building
Miami, Oklahoma

With the certification of the exploration project identified above, you were asked to inform our office about changes in the status of the property and production from it.

To assist you to furnish this information and to assure the accuracy of our records, we ask that you answer the questions below and return one copy to this office with copies of any pertinent documents.

ACTING Field Officer Lawrence G Hook

1. Since June 30, 1959, has there been a change in ownership, lease, or sublease about which the OME has not been notified? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents. Yes ☐ No ☒

2. Since June 30, 1959, has there been any production from the property?* Yes ☐ No ☒

A. If so and it was shipped, give name and address of purchaser?

	Quantity	Value

B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

Submitted by:

Name The Eagle-Picher Company

Address Box 1040, Galena, Illinois

Title Ed H. Koehler, Office Manager

Date November 3, 1960

MME Form 63 8-60 * Property means land subject to the contract. 79340-60

DMEA CERTIFIED PROJECTS-[illegible] THIS PERIOD

Reporting Period: January 1, 1959 to June 30, 1959

DMEA-1203, Idm-[illegible] (lead-zinc) [illegible] Mining Co., Little Grant Mine, Grant County, [illegible]

DMEA-1263, Idm-[illegible], Vinegar Hill Mine [illegible] Kanesek & [illegible] Leases, St. [illegible], LaFayette County, [illegible]

DMEA-1315, Idm-[illegible] (lead-zinc) [illegible] J. E. & Lela Miller Leases, [illegible] County, Iowa

DMEA-1560, Idm-[illegible], (lead-zinc) Hedgeville Mining Co., Weigel Lease, Iowa County, Wisconsin.

DMEA-1561, Idm-[illegible], (lead-zinc) Hedgeville Mining Co., Powell Lease, Iowa County, Wisconsin.

DMEA-2073, Idm-[illegible], (lead-zinc) Cuba Mining Co., Ivy Construction Co. Assignee, Iowa County, Wisconsin.

DMEA-2184, Idm-[illegible], (lead-zinc) Mayer & Thiede Mining Co. Rowe Mine, LaFayette County, Wisconsin.

DMEA-2399, Idm-[illegible] (lead-zinc) Eagle Picker Mining Co. Calvert & Ralph Leases, LaFayette County, Wisconsin

DMEA-3510, Idm-[illegible], (lead-zinc) Paul Gille Dawson & Lindsay Leases, LaFayette County, Wisconsin

Reported by Thomas E. Mullins,
U. S. Geological Survey
Platteville, Wisconsin

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UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines, Reg. V

August 21, 1958

Memorandum

To: R. A. Laurence, Executive Officer, DMEA Field Team, Region V, Knoxville, Tenn.

From: Supervising Mine Examination and Exploration Engineer, North Central Experiment Station

Subject: Semi-Annual Report of Certified Projects, Upper Mississippi Valley Lead-Zinc District, January 1 - June 30, 1958

According to your recent request, I made the examination of the one mine operating on a certified project. This was DMEA Docket No. 1206, Contract 157, Eagle Picher Mining Co. (assigned from Calumet and Hecla). Six copies of the report are attached.

The other certified projects in the area are not operating and have not operated since my last inspection in January of this year. The non-operating projects are as follows:

DMEA-1203, Piquette Mining Co.
DMEA-1227, Vinegar Hill
DMEA-1263, American Zinc Co.
DMEA-1315, Merritt-Wallis-Rinker (C.E. & Lula M. Miller)
DMEA-1560, Dodgeville Mining Co.
DMEA-1561, Dodgeville Mining Co.
DMEA-2073, Cuba Mining Co.
DMEA-2184, Mayer & Thiede Mining Co.
DMEA-2399, Eagle Picher Mining Co.
DMEA-3510, Paul Gille

/s/ Wesley A. Grosh

C
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Y

Semi-Annual Report of Certified Projects

Reporting period: July 1 - December 31, 1957 Date of examination: Jan. 28, 1958
Operator: The Eagle Picher Co.
Mine name: Francis M. Calvert and Clarence P. Ralph Leases
County and state: Lafayette County, Wisconsin
Docket No. and commodity: DMEA 2399, Lead-Zinc
Contract No.: E339

Date of contract: June 11, 1952
Date of certification: September 3, 1954
Expiration date of royalty payments: September 3, 1964

Total amount of contract: $191,230.78
Total expenditures under contract: $67,957.85
Amount of Government participation at 50%: $33,978.83

Royalty payments this period: None
Total royalty payments to date: None
Percent Government participation repaid: None

Royalty due on production to date: None
Royalty remarks:

The operator no longer retains leases on the William H. Calvert estate and the Fred W. and J. Frank Wilkinson properties.

	Tons	Analysis
Original estimate of DMEA Reserves (Field Team Final Report) Mines ___ Survey X Joint ___	202,000	6.02% Zn-0.11% Pb
Revised estimate of DMEA Reserves (Field Team) Mines X Survey ___ Joint ___	None	
Increase of reserves by work performed subsequent to DMEA project work	Unknown	
Production DMEA ore (This period)	None	
(Previous)	None	
(To date)	None	
Production Operator's ore found subsequent to DMEA work (This period)	None	
(Previous)	None	
(To date)	None	

Percent of revised reserves mined: None

Production remarks:

The operator has no immediate plans for production from these leases.

Wesley A. Grosh
WESLEY A. GROSH

Semi-Annual Report of Certified Project

Reporting period: January 1 - June 30, 1957 Date of examination: July 24, 1957
Operator: The Eagle Picher Co.
Mine name: Francis M. Calvert and Clarence P. Ralph Leases
County and state: Lafayette County, Wisconsin
Docket No. and commodity: DMEA 2399, Lead-Zinc
Contract No.: E339

Date of contract: June 11, 1952
Date of certification: September 3, 1954
Expiration date of royalty payments: ~~September 3, 1964~~ June 11, 1962

Total amount of contract: $191,230.78
Total expenditures under contract: $67,957.85
Amount of Government participation at 50%: $33,978.88

Royalty payments this period: None
Total royalty payments to date: None
Percent Government participation repaid: None

Royalty due on production to date: None
Royalty remarks:

The operator no longer retains leases on the William H. Calvert estate and the Fred W. and J. Frank Wilkinson properties.

	Tons	Analysis
Original estimate of DMEA Reserves (Field Team Final Report) Mines ___ Survey X Joint ___	202,000	6.02% Zn-0.11% Pb
Revised estimate of DMEA Reserves (Field Team) Mines X Survey ___ Joint ___	None	
Increase of reserves by work performed subsequent to DMEA project work	Unknown	
Production DMEA ore (This period)	None	
(Previous)	None	
(To date)	None	
Production Operator's ore found subsequent to DMEA work (This period)	None	
(Previous)	None	
(To date)	None	

Percent of revised reserves mined: None

Production remarks:

The operator has no immediate plans for production from these leases.

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8/13	Att	500

Wesley A. Grosh
WESLEY A. GROSH

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Semi-Annual Report of Certified Project

Reporting period: January 1 - June 30, 1956 Date of examination: July 19, 1956
Operator: The Eagle Picher Co.
Mine name: Hazel Green - Benton area
County and state: Lafayette County, Wisconsin
Docket No. and commodity: DMEA 2399, Lead-Zinc
Contract No.: E339

Date of contract: June 11, 1952
Date of certification: September 3, 1954
Expiration date of royalty payments: June 11, 1962

Total amount of contract: $191,230.78
Total expenditures under contract: $67,957.76
Amount of Government participation at 50%: $33,978.88

Royalty payments this period: None
Total royalty payments to date: None
Percent Government participation repaid: None

Royalty due on production to date: None
Royalty remarks: None

Original estimate of reserves:	202,000 tons	6.02% Zn
Increase of reserves:	None	
Revised estimate of reserves:	202,000 tons	6.02% Zn

Production this period: None
Total DMEA production to date: None
Percent of reserve mined: 0

Production remarks:

There has been no production from the certified area and there is no mining activity in the area at the present time.

Wesley A. Grosh
WESLEY A. GROSH

2399

AGENDA [illegible]

Date 3-1

Referred to:

1. ~~[illegible]~~
2. ~~[illegible]~~
3. ~~[illegible]~~
4. ~~Docket Control Mails and Files~~
5. Area Metals Division
6. Docket Control Mails and Files

Note comments in report regarding:

1. "Expiration date of royalty payments" should be June 11, 1962
2.
3.
4.

[illegible] take appropriate action.

- - - - - -

Action taken by Division:

June 11, 1962 - is filed. J.C.

Initials

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SUPPLEMENT TO
SEMI ANNUAL REPORT OF CERTIFIED PROJECTS

Reporting Period: 7/1-12/31/55 Date of Examination: 1/4-6/56
Operator: The Eagle Picher Co.
Mine Name: Hazel Green-Benton area
County & State: Lafayette County, Wis.
Docket No. & Commodity: 2399 Lead-Zinc
Contract No.: 339

Date of Contract: June 11, 1952
Date of Certification: September 3, 1954
Expiration Date of royalty payments: September 3, 1964

Total Amount of Contract: $191,230.78
Total Expenditures under Contract: $67,957.85
Amount of Government Participation at 50%: $33,978.88

No royalty payments have been made.

No production to date.

Original Estimate of Reserves (Final Report): 202,000 tons of ore

There has been no mining of these reserves since completion of the contract. As far as is known, there have been no additions to the reserves through work conducted by the company.

Wesley A. Grosh
WESLEY A. GROSH
Sup. Mine Exam. & Expl. Engr.
North Central Experiment Station

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.

Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

C O P Y

Dmeh-2399

Betty

January 20, 1956

Memorandum

To: Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Knoxville, Tennessee

From: Mine Examination and Exploration Engineer, North Central Experiment Station

Subject: DMEA semiannual report on certified projects - Period July 1, to December 31, 1955

In response to your request of December 13, 1955, addressed to A. B. Needham, I was assigned to make the semiannual DMEA inspection. I contacted T. E. Mullens of the U. S. Geological Survey in Platteville on January 3, 1956, and he subsequently accompanied me during the next three days on my visits to the certified projects on which mining is being conducted in the area. Mr. Mullens and his staff were very helpful and cooperative during the examination.

Listed below are the activites on the certified DMEA projects as determined by the field examination.

Contract Idm-E339, Docket 2399 (Lead-Zinc), Eagle Picher Co.
Certified September 3, 1954

Claude Dale of the Eagle Picher Co. was interviewed January 5, 1956. He stated the company still retained leases on the Francis M. Clavert and the Clarence P. Ralph properties, and that no mining or prospecting has been conducted on them during the past six months. Also as far as he knew, none of the other properties included in the contract had been leased. Several inquiries were made of people familiar with the activities in the district concerning the status of the leases. No mining or propsecting has been conducted on the properties dropped by the company and as far as could be determined without interviewing the individual owners none of the properties had been leased.

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SEMI-ANNUAL REPORT OF CERTIFIED PROJECT
January 1 to June 30, 1955

On

DMA-2399, Idm-E339 (lead-zinc) EAGLE-PICHER COMPANY

No mining or prospecting has been done on the contract property during this reporting period.

The Francis M Calvert and Clarence P. Ralph leases have been retained by the Operator; all other leases have been dropped.

Certified: September 3, 1954.

Charles J. Stehlik, Mining Engineer
U. S. Bureau of Mines

Allen F. Agnew, Geologist
U. S. Geological Survey

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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March 22, 1954

Belly

Memorandum

To: Defense Minerals Exploration Administration, Contract Administration and Audit Division, Washington, D. C.

From: Special Assistant to the Regional Director, Region V

Subject: Docket DMEA-2399, Contract IDM-E-339, Eagle Picher Co.

We have received the final voucher on the above contract and are forwarding your copies before making payment so that you may prepare a Report of Review. It is not believed necessary for us to forward the originals since the copies you have are identical. The total amount paid to date (Government's share) is $33,625.65 and with the addition of the present voucher the amount will be $33,978.88.

We also need a Notice of Termination from your office as well as Certification of Discovery or Development. The drilling was completed February 4 and operator's final report was received by the Executive Officer on March 8.

L. A. HILL

Attachment

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1954 Docket No. DMEA 2399 Contract No. Idm R 339
Operator's Name The Eagle-Picher Co Minerals Lead & Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					35278.5			
Churn	foot	706.47	370	67,957.85	~~35,278~~	1.926		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		706.47		67,957.85				191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Mar. 10, 1954 Operator The Eagle-Picher Co.
Per A C Dompkins Title Plant Accountant

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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MAR 24 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1954 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50% Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts: ~~Short Term~~						
Drilling	589.05	55,606.82	56,195.87	589.05	55,606.82	56,195.87
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	117.42	11,644.56	11,761.98	117.42	11,644.56	11,761.98
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	706.47	67,251.38	67,957.85	706.47	67,251.38	67,957.85

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Mar 10, 1954 *Payee THE EAGLE-PICHER CO.
Per A C Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 353.23

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. dm E 339 in accordance with the terms of the contract.

Signature Wesley A. Grant Title Mining Engineer Date 3/12/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Exec Officer Date 3/16/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
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WORK PROGRESS REPORT

Docket 2399 Month February

Contract Idm E-339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Francis M. Calvert	53	1/28/54	2/1/54	210
Clarence P. Ralph	31	2/ 2/54	2/4/54	160

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
		None		

TOTAL (completed)(~~[illegible]~~) footage this period 370 To date 35,278.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of March 10, 19 54, totalling $ 706.47, has been carefully checked and approved by me.

APPROVED BY:

Wesley A Grosh
Mining Engineer ~~Geologist~~

W. A. Broughton
~~Mining Engineer~~ Geologist

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT--FEBRUARY, 1954

Bureau Mines Minerals Administration
RECEIVED
MAR 24 1954

	Hole No.	Footage Drilled
Project No. 2		
Francis M. Calvert	53	210
Clarence P. Ralph	31	160
Total footage drilled February - -		370 ft.

Drilling Cost-- 370 feet @ $1.565 per foot	$ 579.05
Plugging 2 holes @ $5.00 each	10.00
*Chief Geologist 1 month @ 2/14 of $425.00	60.71
Field Geologist 1 " 2/14 of 397.00	56.71
Total cost month of February, 1954	$ 706.47

*Note: 14 holes used as a normal month for salary overhead. February--2 holes--2/14 of salaries

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

February 25,1954.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County,Wisconsin, during the month of February, 1954, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	31	Marcasite estimated at 1 to 2% FeS_2 was cut at 100-115 feet depth. The Oil Rock horizon is thick and limy which is an unfavorable factor for zinc mineralization in the lower horizons. This completes our drilling program on the Clarence P. Ralph lease.
Francis Calvert,	53	This hole was drilled to more closely delineate the orebody. Fair to rich marcasite mineralization occurred from 150 to 205 feet depth. Mineralization from 185 to 200 feet depth, in the Gray, Blue and Oil Rock horizons averaged 13.09% FeS_2 and 0.51% ZnS. This completes our drilling program on the Francis Calvert lease.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

Geologist: H. W. Davis

DRILL RECORD
THE EAGLE-PICHER COMPANY

DRILL HOLE NO. 53

Property Name: FRANCIS M. CALVERT
Started: Jan.28,1954. Finished: Feb.1,1954.
Drill Owner: J. F. Robinson
Drill Runner: L. J. Brown

COLLAR ELEVATION: 965.01'
LOCATION: 75' N. & 100' W. from DH #36.

DEPTH		DESCRIPTION
0	8	Soil
8	10	Buff dolomite
10	15	Coarse cuts: Buff dolomite
15	25	Coarse cuts: Buff dolomite
25	35	Buff dolomite (rather dark)
35	45	Buff dolomite
45	55	Dark buff and buff dolomite, a speck of marcasite
55	60	Dark buff dolomite, speck of marcasite
60	65	Brown dolomite, buff dolomite 70-30, thin trace of marcasite
65	70	Brown dolomite, buff dolomite 97-3, speck of calcite, marcasite 1/
70	75	Brown dolomite, buff dolomite 99-1, trace of calcite, marcasite 1/10 DRAB- 77'
75	80	Brown dolomite, gray chert 95-5, trace of brown chert, marcasite
80	85	Brown dolomite, gray-brown and tan chert 92-8, marcasite 2
85	90	Brown dolomite, gray, brown, tan and marcasite-speckled chert 90-10, marcasite 1
90	100	Brown dolomite, gray and marcasite speckled chert 93-7, marcasite
100	110	Brown dolomite, light gray and white chert 93-7, marcasite 2
110	120	Pale brown dolomite, light gray chert 96-4, marcasite 1
120	130	Gray-brown dolomite, gray chert 93-7, marcasite 4/10
130	140	Brown dolomite, tan and gray-brown chert 97-3, marcasite 2
140	150	Brown dolomite, gray chert 99-1, marcasite 3
150	155	Brown dolomite, gray marcasite-speckled chert 95-5, marcasite 7
155	160	Brown dolomite, gray marcasite speckled chert 94-6, marcasite 12, a speck of blende
160	165	Brown dolomite, gray and light brown chert 93-7, marcasite 2
165	170	No recovery
170	177½	No recovery
177½	180	Brown dolomite (medium cuts), gray dolomite (coarse cuts) 80-20, trace of dark gray cave clay, trace light gray clay, marcasite 9, blende 1/10 GRAY- 179.5'
180	182½	Very small recovery: Gray dolomite, considerable brown dolomite and chert ravelling, dark gray clay 2, marcasite 15, blende 1
182½	185	No recovery
185	187½	Gray dolomite, trace of dark gray clay, marcasite 20, blende 3
187½	190	Very small recovery: Brown-gray dolomite, some brown dolomite & chert ravellings, marcasite 15, blende 2 BLUE- 192.5'
190	192½	Gray dolomite, marcasite 7, blende 4/10
192½	195	Light gray dolomite with few dark specks, trace of gray clay, marcasite 10, blende 3/10
195	197½	Light gray dolomite with few dark specks, gray clay 1, marcasite 18, blende 1
197½	200	Gray dark speckled dolomite, brown dolomite and fossiliferous dolomite, 95-5, marcasite 15, blende 1/2
200	202½	Brown fossiliferous dolomite and brown clay, marcasite 6, blende 2/10, a speck of galena

(CONTINUED ON NEXT PAGE)

DRILL HOLE NO. 53 CON'T.

Property Name: FRANCIS M. CALVERT

DEPTH		DESCRIPTION
202½	205	Brown fossiliferous dolomite, green clay 60-40, marcasite 4, blende 1/10, a speck of galena, trace of phosphate
205	207½	Bentonite, dark brown dolomite and chocolate brown shale, gray dolomitic limestone, 97-2-1, marcasite 2/10, a speck of blende and galena
207½	210	Gray dolomitic limestone, trace of chocolate brown shale, marcasite 1, blende 2/10, a speck of galena

OIL ROCK- 199.9'
CLAY- 204'
GLASS ROCK- 207.4'
McGREGOR- 207.5'

T.D.M: 210.0 feet, with steel tape

Water: At 45 feet.

Assays: Yes.

DRILLERS REMARKS:

Broken ground 155 to 192½

Soft bottom.

ASSAYS

		Blende	FeS2	Galena
155	160	0.05	9.85	Trace
185	187½	1.45	12.19	"
187½	190	0.65	10.05	"
190	192½	0.25	5.56	"
192½	195	0.30	11.98	"
195	197½	0.25	19.47	"
197½	200	0.15	19.26	"

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

March 18, 1954

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for the month of January 1954, Docket DMEA 2399, Contract Idm-E-339, The Eagle-Picher Co., Galena, Illinois

Attached are two copies of the subject report for the month of January 1954, as processed for payment, for your files.

A. B. NEEDHAM

Attachments

DRILL LOG
THE EAGLE-PICHER COMPANY

Geologist: H. W. Davis

DRILL HOLE NO. 31

Property Name: CLARENCE P. RALPH
Started: Feb.2,1954. Finished: Feb.4,1954.
Drill Owner: J.F.Robinson
Drill Runner: L.J.Brown

COLLAR ELEVATION: 940.20'

LOCATION: 300' E. & 50' N. from DH #28.

DEPTH		DESCRIPTION
0	14	Buffish brown clay
14	20	Buff dolomite
20	25	Brown-buff dolomite
25	30	Brown-buff dolomite, gray chert 95-5 — BLUE- 27.5'
30	35	Buffish-brown dolomite, gray chert 96-4, trace of marcasite
35	40	Brown dolomite, gray chert 94-6, few specks brown and tan chert, marcasite 1/10
40	50	Brown dolomite, gray and tan chert 97-3, trace of marcasite
50	60	Gray dolomite, white chert 92-8, trace of marcasite
60	70	Brown-gray dolomite, white chert 93-7, few specks of marcasite
70	80	Gray-brown dolomite, gray chert 92-8, trace of rusty brown clay, trace of buff dolomite, thin trace of marcasite
80	90	Brown dolomite, tan chert 95-5, marcasite 1/10
90	100	Brown dolomite, tan chert 99-1, marcasite 3/10
100	110	Dark brown dolomite, marcasite speckled chert 75-25, rusty clay 1, marcasite 2
110	115	Dark brown dolomite, brown-gray chert 98-2, marcasite 1
115	120	Gray dolomite, marcasite 3/10 — GRAY- 115'
120	122½	Gray dolomite, marcasite 2/10
122½	125	Brown-gray dolomite, trace of rusty clay, marcasite 1/10
125	127½	Brown-gray dolomite, marcasite 1/10 — BLUE- 128.5'
127½	130	Gray dark speckled dolomite, brown-gray dolomite 60-40, trace of marcasite
130	132½	Dark gray dark speckled dolomite, marcasite 1/10
132½	135	Gray dark speckled dolomite, marcasite 4/10 — OIL ROCK- 135.3'
135	137½	Brown dolomitic limestone, gray dark speckled dolomite 90-10, marcasite 2/10
137½	140	Brown dolomitic limestone, dark brown shale 90-10, marcasite 2/10
140	142½	Brown dolomitic limestone, marcasite 1/10
142½	145	Brown dolomitic limestone, marcasite 1/10
145	147½	Brown dolomitic limestone, gray dolomitic limestone with dark specks 70-30, trace of marcasite — CLAY - 148'
147½	150	Dark gray fossiliferous limestone and green shale, brown-gray dolomite 80-20, marcasite 1/10 — GLASS- 150'
150	152½	Coarse cuts: Dark brown dolomite, specks of calcite, marcasite 1/10
152½	155	Coarse cuts: Dark brown dolomite, specks of calcite, marcasite 1/10
155	157½	Brown dolomite, chocolate brown shale 95-5, marcasite 1/10
157½	160	Gray dolomitic limestone, brown dolomite 98-2, trace of marcasite — McGREGOR- 157.5'

T.D.M: 160.5 feet, with steel tape

Water: At 31 feet

Assays: No

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January 1954 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 191,230.89 Government Participation: 50% Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Short Form~~ Contracts:						3/24/54 J.W. Acd.
Drilling	2484.53	53,122.29	55,606.82	2484.53	53,122.29	55,606.82
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	469.72	11,174.84	11,644.56	469.72	11,174.84	11,644.56
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2954.25	64,297.13	67,251.38	2954.25	64,297.13	67,251.38

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Feb. 17, 1954 *Payee The Eagle-Picher Co.
Per A C Dempsey Title Plant Acct.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1477.12 Ab

Signature L. A. Hill
(Authorized Certifying Officer)

Date MAR 14 1954 Vou. No. 22

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. dm 2339 in accordance with the terms of the contract.

Signature Wesley A. Brush Title Mining Engineer Date 2/23/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature O. B. Weldhaum Title Exec Officer Date 2/25/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

22

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1954 Docket No. DMEA 2399 Contract No. Idn 2339
Operator's Name THE EAGLE-PICHER CO Minerals Zinc & Lead
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					34 908.5			
Churn	foot	2966.25	1562	67,291.38	~~35,908~~	1.927		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2966.25		67,291.38				191,290.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Feb. 17, 1954 Operator The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Acct.
A. C. Tompkins

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT--JANUARY, 1954 22

	Hole No.	Footage Drilled
Project No. 2		
Francis M. Calvert	49	225
	50	165
	51	197
	52	230
Clarence P. Ralph	27	240
	28	170
	29	165
	30	170
Total footage drilled January - - - - -		1562 ft.

Drilling cost - 1562 feet @ 1.565 per foot	$2,444.53
Plugging 8 holes @ $5.00 each	40.00
*Chief Geologist 1 month @ 8/14 of $425.00	242.86
Field " 1 " @ 8/14 of $397.00	226.86
Total cost month of January, 1954	$2,954.25

*Note: 14 holes used as a normal month for salary overhead. January--8 holes--8/14 of salaries

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

February 4,1954.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County,Wisconsin, during the month of January, 1954, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	27	Mineralization from 215 to 232½ feet depth in the Blue, Oil Rock & Clay Bed horizons averaged 0.73% ZnS and 9.41% FeS_2. There was open ground from 200 to 212½ feet.
Clarence P. Ralph,	28	The marcasite mineralization was estimated at 4 to 12% FeS_2 from 70 to 160 feet depth. The ground was loose and broken from 85 to 155 feet depth. There was no blende noted in this hole.
Clarence P. Ralph,	29	From 55 to 110, and 135 to 165 feet depth the marcasite mineralization was estimated at 4 to 10% FeS_2. Only a few specks of blende were noted in this hole.
Clarence P. Ralph,	30	Marcasite mineralization estimated at 2 to 5% FeS_2 was cut from 110 to 125 feet depth. This drill hole marks the north edge of the thin Oil Rock & Glass Rock zone that contained blende in the North Star mine and marcasite in drill holes numbers 28 & 29.

LEASE	DRILL HOLE NO.	REMARKS
Francis Calvert,	49	Marcasite mineralization estimated at 5 to 20% FeS_2 was cut from 55 to 105 feet depth. A few specks of blende were noted.
Francis Calvert,	50	Mineralization from 135 to 150 feet depth averaged 5.93% ZnS and 14.87% FeS_2. Broken ground and small recovery of cuttings from 80 to 150 feet depth.
Francis Calvert,	51	Fair marcasite mineralization was cut at 45-50, 70-95, 110-115, and 155 to 170 feet depth. Low grade blende mineralization was cut at 85 to 95 feet depth. This hole was loose and open from 70 to 95 feet depth and from 125 to 170 feet depth.
Francis Calvert,	52	Marcasite mineralization estimated to average 8% FeS_2 was cut at 180 to 200 feet depth. Broken ground and small recovery of cuttings from 185 to 200 feet depth.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month January 1954

Contract Idm E-339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Francis M. Calvert	49	1/14/54	1/16/54	225
" " "	50	1/18/54	1/20/54	165
" " "	51	1/20/54	1/23/54	197
" " "	52	1/25/54	1/27/54	230
Clarence P. Ralph	27	12/30/53	1/ 4/54	240
" " "	28	1/ 4/54	1/ 7/54	170
" " "	29	1/ 7/54	1/ 9/54	165
" " "	30	1/11/54	1/13/54	170

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Francis M. Calvert	53	1/28/54	170	

TOTAL (completed)(~~[illegible]~~) footage this period 1,562 To date 34,908.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of February 17, 19 54, totalling $ 2,954.25, has been carefully checked and approved by me.

APPROVED BY:

Wesley A. Davis
Mining Engineer ~~Geologist~~

W. A. Burnham
~~Mining Engineer~~ Geologist

DRILL RECORD
THE [illegible]-[illegible] COMPANY

Geologist: H. [illegible] Davis

DRILL HOLE No. 49

Property Name: [illegible]
Started: Jan.14,1954. Finished: Jan.16,1954.
Drill Owner: J.F.Robinson
Drill Runner: L.J.Brown

Collar [illegible]
LOCATION: 300' N. & 50' W. from DH #4.

DEPTH		DESCRIPTION
0	10	Dark buff clay
10	15	Buff dolomite, buff clay 70-30
15	25	Dark buff-brown clay
25	30	Buff dolomite, limonite 1, few specks of marcasite
30	40	Buff dolomite (rather coarse cuts), limonite 2/10
40	45	Buff dolomite, limonite 3/10
45	50	Dark buff dolomite, limonite 1, few specks of galena
50	55	Dark buff dolomite, limonite 3, few specks of galena
55	60	Very coarse cuts: Dark buff dolomite, limonite 7, trace of galena
60	70	Buff dolomite to brown-buff dolomite, limonite 8, marcasite 1, few specks of galena
70	75	Buffish-brown dolomite, limonite-clay 4, limonite and marcasite 10, specks of galena
75	80	Buff dolomite, limonite/clay 10, limonite and marcasite 15, a speck of galena
80	85	Brown marcasite-speckled dolomite, limonite/clay 2, marcasite & limonite 20, specks of galena
85	90	Brown dolomite,(some marcasite-speckled), marcasite & limonite 6, a speck of galeite
90	95	Buffish-brown dolomite, brown chert 98-2, marcasite & limonite 5,
95	100	Buffish-brown dolomite, gray and marcasite-speckled chert 90-10, marcasite & limonite 8 GRAY- 92.5'
100	105	Buffish-brown dolomite, gray marcasite-speckled and brown chert 96-4, marcasite & limonite 5
105	110	Buffish-brown dolomite, gray and marcasite-speckled chert 93-7, limonite/clay 1, marcasite & limonite 3
110	120	Brown dolomite, gray & light brown-gray chert 92-8, marcasite 4
120	130	Pale brown-gray dolomite, light gray and white chert 94-6, marcasite 7/10
130	140	Gray-brown dolomite, gray chert 91-9, marcasite 1
140	150	Gray-brown dolomite, gray & tan chert 93-7, marcasite 1
150	160	Brown dolomite, tan chert 95-5, marcasite 6/10
160	165	Brown dolomite, light gray & tan chert 99-1, marcasite 7/10
165	170	No Recovery
170	180	Brown dolomite, tan & gray-brown chert 82-18, marcasite 2 1/2
180	185	Brown dolomite, tan & gray-brown chert 97-3, marcasite 2 1/2
185	190	Brown dolomite, gray dolomite 95-5, marcasite 1/2 GRAY-189.7'
190	195	Gray dolomite, marcasite 4/10
195	200	Brown-gray dolomite, marcasite 1/2 BLUE- 201.0'
200	202½	Gray dark-speckled dolomitic limestone, brown-gray dolomite 60-40, marcasite 2/10
202½	205	Dark gray dark-speckled dolomite, marcasite 3/10 OIL ROCK-206.5'
205	207½	Gray dark speckled dolomite, dark brown dolomite 60-40, marcasite 2/10
207½	210	Brown fossiliferous limestone and dark brown shale, marcasite 2/10
210	212½	Brown fossiliferous limestone and brown-gray dark speckled limestone, trace of green shale and light gray clay, marcasite 1/10, a speck of blende and galena CLAY- 212.5'

(CONTINUED ON NEXT PAGE)

Property Name: FRANCIS M. CALVERT.

DEPTH		DESCRIPTION
212½		
	215	Brown limestone, green shale and dark gray fossiliferous limestone 70-30, marcasite 3/10, a speck of phosphate CLASS-211.2'
215	217½	Dark brown sugary dolomite, chocolate brown shale 99-1, marcasite 1/10
217½	220	Dark brown limestone and tan limestone, chocolate brown shale 99-1, marcasite 2/10
220	222½	Gray dolomitic limestone, dark brownlimestone 90-10, marcasite 1/10
222½	225	Gray dolomitic limestone, marcasite 1/10 McGREGOR- 220.1'

T.D.: 226.0 feet, with steel tape

Water: At 54 feet

Assays: No

Geologist: H. W. Davis.

DRILL RECORD
THE EAGLE-PICHER COMPANY

DRILL HOLE NO. 50

Property Name: FRANCIS M. CALVERT
Started: Jan. 18, 1954. Finished: Jan. 20, 1954.
Drill Owner: J. F. Robinson
Drill Runner: L. J. Brown

COLLAR ELEVATION: 926.06'
LOCATION: S.78°E. 120' from D.H.# 31.

DEPTH		DESCRIPTION
0	7	Black soil
7	15	Coarse cuts: Buff dolomite, gray shale 95-5
15	20	Brown-buff dolomite and buff dolomite, few specks buff & red residual chert
20	25	Buffish-brown dolomite, dark buff & red chert 95-5, trace marcasite
25	30	Fine cuts: Buff dolomite, marcasite 1/2
30	35	Brown dolomite, dark buff chert and red chert (ravelling) 92-8, marcasite 3/10
35	40	Brown dolomite, gray-brown chert 98-2, some buff chert ravelling DRAB- 37.5'
40	45	Brown dolomite, marcasite speckled chert 85-15, marcasite 3, blende 1/10, a speck of galena
45	50	Brown dolomite, gray marcasite-speckled chert 88-12, brown chert 1, marcasite 7, blende 1/2
50	55	Brown dolomite, gray marcasite-speckled chert 93-7, marcasite 4, blende 2/10
55	60	Brown dolomite, few specks gray-brown chert, marcasite 1, blende 1/1
60	65	Brown dolomite, brown-gray & marcasite-speckled chert 80-20, marcasite 8, blende 1
65	70	Brown dolomite, gray chert 92-8, marcasite 10, blende 1
70	75	Light gray dolomite, light gray and white chert 92-8, marcasite 2, blende 4/10
75	80	Gray-brown dolomite, light gray chert 98-2, marcasite 7, blende 4/1
80	85	Brown dolomite, gray chert and marcasite-speckled chert 90-10, marcasite 12, blende 6/10
85	90	Gray-brown dolomite, gray chert and marcasite-speckled chert 97-3, marcasite 15, blende 1/2
90	95	Brown dolomite, gray marcasite-speckled & tan chert 88-12, marcasite 18, blende 3/10
95	100	Brown dolomite, tan chert 94-6, marcasite 8, blende 1/10
100	105	Brown dolomite, tand & gray chert 95-5, marcasite 20, blende 2
105	110	No recovery.
110	115	Dark brown marcasite-speckled dolomite, marcasite 25, few specks of blende
115	120	Brown dolomite, gray marcasite-speckled chert 75-25, some dark buff chert ravelling, marcasite 15, few specks of blende
120	125	Brown dolomite, gray marcasite-speckled chert 92-8, marcasite 18, a speck of blende GRAY- 125.3'
125	130	Gray dolomite, brown dolomite 95-5, marcasite 6, a speck of blende
130	132½	Gray dolomite, marcasite 4, few specks of blende
132½	135	Coarse cuts: Brown-gray marcasite speckled dolomite, marcasite 5, blende 3/10
135	137½	Gray and brown-gray dolomite, marcasite 7, blende 2
137½	140	No recovery
140	142½	Gray-brown dolomite, marcasite 16, blende 1
142½	145	Gray-brown dolomite, trace of dark gray clay, marcasite 20, blende

(CONTINUED ON NEXT PAGE)

DRILL HOLE NO. 50 CON'T.

Property Name: FRANCIS M. CALVERT.

DEPTH		DESCRIPTION
145	147½	Very small sample: Gray dolomite, gray dark speckled dolomite 80-20, marcasite 10, blende 10 BLUE- 147' (?)
147½	150	Gray dark speckled dolomite, trace of dark gray clay, marcasite 50, blende 12
150	152½	Gray dark speckled dolomite, gray clay 95-5, marcasite 25, blende 4
152½	155	Brown fossiliferous dolomitic limestone, marcasite 15, blende 3 OIL ROCK- 152.5'
155	157½	Brown fossiliferous dolomitic limestone, dark brown shale 80-20, marcasite 10, blende 2
157½	160	Green clay, brown fossiliferous dolomitic limestone 80-20, marcasite 7, blende 1, trace of phosphate CLAY BED- 158'
160	162½	Brown dolomite, green clay and bentonite 80-20, marcasite 10, blende 1 GLASS (per driller)- 162'
162½	165	Light gray dolomitic limestone, dark brown dolomite 80-20, marcasite 7, blende 1 MeBANOR- 163'

T.D.M: 166.3' with steel tape

Water: At 4½ feet

Assays: Yes

REMARKS: There seems to be an excess thickness of "Gray" and the "Blue" is rather thin.

Driller reports 'Broken Ground' at 80 to 150 feet and mostly small recoveries.

Oil Rock and Glass Rock were 'Soft'

A S S A Y S

		Blende	FeS2	Galena
60	65	0.10	8.13	Trace
65	70	0.35	5.13	"
80	85	0.25	7.06	"
100	105	0.60	9.63	"
110	115	0.10	15.40	"
135	137½	7.00	12.19	"
140	142½	1.00	13.91	"
142½	145	9.55	14.55	"
145	147½	8.05	11.77	"
147½	150	4.05	36.80	"
150	152½	0.95	18.60	"
152½	155	0.85	16.90	"
155	157½	0.25	11.34	"

Geologist: H. W. Davis.

DRILL RECORD
THE EAGLE-PICHER COMPANY

22

DRILL HOLE NO. 51

Property Name: FRANCIS M. CALVERT
Started: Jan.20,1954. Finished: Jan.23,1954
Drill Owner: J. P. Robinson
Drill Runner: L.J.Brown

COLLAR ELEVATION: 950.07'
LOCATION: Midway #33 (Calvert) & #7 (C.P.Ralph)

DEPTH		DESCRIPTION
0	3½	Brown and Buff clay
3½	10	Coarse cuts: Buff dolomite trace of limonite
10	20	Coarse cuts: Buff dolomite, trace of limonite
20	30	Rather dark buff dolomite trace of limonite
30	35	Buff dolomite trace of brown-buff dolomite, limonite and marcasite 2, a speck of blende
35	40	Buff dolomite, trace of brown-buff dolomite, marcasite and limonite 7, blende 3/10
40	45	Fairly coarse cuts: Gray-brown dolomite, buff dolomite 95-5, marcasite 1, few specks of blende
45	50	Brown marcasite-speckled dolomite, marcasite 12, blende 2/10
50	55	Buffish-brown dolomite, marcasite 3, blende 1/10
55	60	Buffish-brown dolomite, marcasite 2, trace of blende
60	65	Brown dolomite, few specks calcite, marcasite 6/10, few specks blend
65	70	Buffish brown dolomite, gray chert 94-6, marcasite 1, blende 1/2 DRAB- 67.5'
70	75	Buffish brown dolomite, gray chert 92-8, marcasite 10, blende 1 (?)
75	80	Brown dolomite, gray-brown chert 93-7, marcasite 8, blende 6/10
80	85	Brown dolomite, gray chert 99-1, marcasite 3, blende 8/10
85	90	Pale brown dolomite, light gray and tan chert 90-10, marcasite 10, blende 2.
90	95	Pale brown-gray dolomite, light gray chert 99-1, marcasite 5, blende
95	100	Light gray dolomite, light gray chert 90-10, marcasite ½, blende 6/10 2
100	105	Pale gray-brown dolomite, light tan chert 95-5, marcasite 2, blende 4/10
105	110	Brown dolomite, gray chert 97-3, marcasite 1, blende 1/10
110	115	Brown dolomite, gray & gray-brown chert 80-20, marcasite 12, blende ½
115	120	Brown dolomite, few specks gray chert, marcasite 1, blende 2/10
120	125	Brown dolomite, tan & gray chert 92-8, marcasite 2, blende 1/10
125	130	Brown dolomite, tan chert 99-1, marcasite 2, blende 1/10
130	135	Brown dolomite, tan chert 94-6, trace of pale green shale, marcasite 2½, trace of blende
135	140	Dark brown marcasite-speckled dolomite, few specks chert, marcasite 2
140	145	Buffish-brown dolomite, tan chert 98-2, marcasite 4, specks of blende
145	150	Rather coarse cuts: Dark brown dolomite, light brown chert 92-8, marcasite 1
150	155	Rather coarse cuts: Dark brown dolomite, brown chert 93-7, marcasite 7/10
155	160	Brown dolomite, tan chert 98-2, marcasite 10
160	165	Fairly coarse cuts of rather dark brown dolomite, marcasite 7
165	170	Gray dolomite, brown dolomite 90-10, marcasite 5 GRAY- 165.5'
170	172½	Gray dolomite, marcasite 2
172½	175	Coarse cuts: Brown-gray dolomite, marcasite ½, few coarse specks of blende
175	177½	Fine cuts: Gray dolomite, marcasite 4 BLUE-179.5'
177½	180	Fine cuts: Brown-gray dolomite, gray clay 80-20, marcasite 3
180	182½	Dark brown-gray dark speckled dolomite, trace of gray clay, marcasite 1½

(CONTINUED ON NEXT PAGE)

Geologist: N. F. Davis

PAGE # 2.

DRILL HOLE NO. 51 CON'T.

22

Property Name: FRANCIS M. CALVERT.

DEPTH		DESCRIPTION
182½	185	Brown fossiliferous dolomitic limestone, gray dark speckled dolomite 60-40, marcasite 1 OIL ROCK- 183.5'
185	187½	Dark brown fossiliferous dolomitic limestone, marcasite 3
187½	190	Green clay, brown fossiliferous dolomitic limestone 80-20, marcasite 1 CLAY MED- 188'
190	192½	Coarse cuts: Dark brown sugary dolomite, chocolate brown shale 80-20, marcasite 1/2 GLASS ROCK- 190'
192½	195	Gray dolomitic limestone, dark brown dolomite 97-3, marcasite 2
195	197½	Brown-gray dolomitic limestone (some coarse cuts), marcasite 1½ McGREGOR-192.5'

T.D.M: 198.6 feet, with steel tape

WATER: At 29 feet. (Adjust down 1 ft.)

Assays: Yes

DRILLERS REMARKS: Lost most of cuttings 70 to 95'
Broken ground 125 - 170'
Soft ground 177½ - 190'

ASSAYS

		Blende	FeS2	Galena
45	50	0.40	6.42	Trace
70	75	1.30	4.49	"
75	80	0.75	6.42	"
80	85	1.25	6.20	"
85	90	2.20	9.84	"
90	95	4.20	4.28	"
110	115	0.60	10.48	"

Geologist: H. P. Davis.

DRILL RECORD
THE HOLT-FISHER COMPANY

22

DRILL HOLE NO.52

Property Name: FRANCIS M. CALVERT
Started: Jan.25,1954. Finished: Jan.27,1954.
Drill Owner: J. P. Robinson
Drill Runner: L.J.Brown

COLLAR ELEVATION: 986.85'
LOCATION: 60' S. & 150' W. from DH #38.

DEPTH		DESCRIPTION
0	11	Brown-buff clay
11	15	Buff dolomite, gray dolomite 95-5, specks of marcasite
15	20	Coarse cuts: Buff dolomite, specks of gray dolomite, speck of marcasite
20	25	Buff dolomite, buff clay 90-10
25	35	Buff dolomite
35	50	Buff dolomite
50	70	Buff dolomite (rather dark)
70	80	Buff dolomite (rather dark)
80	90	Dark buff calcareous dolomite
90	95	Darkbuff to brown-buff dolomite, few specks limonite
95	100	Buff dolomite, light gray dolomite 60-40, trace of buff clay, trace of marcasite DRAB-100'
100	105	Light gray dolomite, light gray chert and white chert 92-8, marcasite 4
105	110	Light brown-gray dolomite, light gray chert & white chert 96-4, marcasite 2
110	120	Light brown-gray dolomite, light gray chert & white chert 93-7, marcasite 1½
120	130	Gray dolomite, gray & white chert 98-2, marcasite ½
130	140	Light brown-gray dolomite, light gray & white chert 91-9, marcasite 2/10
140	150	Light brown-gray dolomite, gray & brown-gray chert 92-8, marcasite 1
150	155	Light brown-gray dolomite, light gray chert 96-4, marcasite 1
155	160	Brown dolomite, tan chert 95-5, few specks marcasite-speckled chert, marcasite 4/10
160	165	Brown dolomite, tan chert 96-4, trace of marcasite
165	170	Brown dolomite, tan chert 85-15, marcasite 3/10
170	180	Brown dolomite, tan chert 99-1, marcasite 2
180	190	Brown dolomite, tan & marcasite-speckled chert 90-10, marcasite 10
190	195	Brown dolomite, brown, tan & marcasite speckled chert 95-5, marcasite 6
195	200	Dark brown dolomite, trace of chert, marcasite 8 GRAY- 200'
200	205	Gray dolomite, marcasite 1
205	207½	Gray dolomite, marcasite 1
207½	210	Gray-brown dolomite, marcasite 3/10
210	212½	Gray-brown dolomite, marcasite 1
212½	215	Gray-brown dolomite, gray clay 80-20, few specks gray dark-speckled dolomite, marcasite 1
215	217½	Gray dark-speckled dolomite, marcasite 6/10
217½	220	Gray dark-speckled dolomite, gray clay 60-40, marcasite 8/10
220	222½	Dark brown fossiliferous dolomitic limestone, marcasite ½, few specks of blende OIL ROCK-220.0'
222½	225	Dark brown fossiliferous dolomitic limestone, green clay 95-5, marcasite 3/10, trace of blende CLAY BED- 224.9'
225	227½	Gray clay, dark brown dolomite (coarse cuts) 80-20, marcasite 2/10, few specks of blende GLASS ROCK- 227.0'

(CONTINUED ON NEXT PAGE)

Property Name: FRANCIS M. CALVERT.

DEPTH	DESCRIPTION
227½ 230	Coarse cuts: Gray dolomitic limestone, dark brown dolomite and chocolate brown shale 60-40, marcasite 2/10, a speck of blende MeGREGOR- 228.5'

T.D.M: 231.5 feet, with steel tape

Water: At 67 feet (Adjust down 1½ feet)

Assays: No.

DRILLER'S REMARKS:

Broken ground and lost some cuttings 185 to 200 feet.

Soft bottom.

Geologist: H. [illegible] Davis

Property Name: [illegible] Hall
Started: Dec.30,1953. Finished: Jan.4,1954.
Drill Owner: J. [illegible] Robinson
Drill Runner: L.J.Brown

[illegible]: 992.10'
[illegible]: 100' N. from DH #8

[illegible]	[illegible]	[illegible]
0	6	Soil
6	10	Light buff dolomite, few specks of gray dolomite
10	20	Light buff dolomite
20	50	Buff dolomite
50	85	Dark buff dolomite
85	90	Dark buff to buffish-brown dolomite, few specks marcasite, blende and galena
90	95	Dark buff & buffish-brown dolomite, thin trace of marcasite, speck of blende
95	100	Brown-buff dolomite, marcasite 1/10
100	105	Brown dolomite, brown chert 95-5, marcasite 1/10 [illegible] -102.5'
105	110	Light brown dolomite, white chert 94-6, marcasite 1/10, a speck of blende
110	120	Brown dolomite, brown and marcasite-speckled chert 93-7, marcasite 2, specks of blende and galena
120	130	Brown dolomite, brown-gray chert 96-4, marcasite 1, a speck of blende and galena
130	140	Brown dolomite, light gray chert 95-5, marcasite 1 1/2
140	150	Gray-brown dolomite, few specks tan chert, marcasite 1/2
150	160	Gray-brown dolomite, light brown-gray chert 97-3, marcasite 4/10
160	170	Brown dolomite, tan chert 94-6, marcasite 3/10
170	180	Brown dolomite, trace of tan chert, marcasite 3/10
180	190	Brown dolomite, tan chert 96-4, marcasite 2
190	195	Brown dolomite, tan & brown chert 95-5, marcasite 2
195	200	Brown dolomite, tan chert 97-3, marcasite 4
200	205	No recovery GRAY- 205'
205	210	Very small recovery: Gray dolomite, gray clay 98-2, marcasite 4
210	212½	No recovery
212½	215	Gray dolomite, marcasite 7
215	217½	Brown-gray marcasite speckled dolomite, marcasite 10, few specks of blende
217½	220	Brown-gray dolomite (slightly marcasite-speckled), marcasite 20, blende 1 (?)
220	222½	Brown-gray dolomite (slightly marcasite-speckled), gray clay 95-5, marcasite 12, blende 1 LAY- 220'
222½	225	Dark brown-gray dolomite (slightly marcasite-speckled), gray clay 3, marcasite 5, blende 2
225	227½	Dark brown-gray dolomite, brown dolomitic limestone 80-20, (some buff dolomite revelling), marcasite 6, blende 2 [illegible] -227.5'
227½	230	Light brown fossiliferous dolomitic limestone, trace of brown shale, marcasite 7, blende 2
230	232½	Light brown fossiliferous dolomitic limestone, brown shale 2, marcasite 4, blende 1 [illegible]- 232.5'
232½	235	Green clay, marcasite 1/2, few course crystals of blende
235	237½	Dark brown dolomite (course cuts) 80-20, marcasite 2/10, speck blende
237½	240	Dark brown dolomite, gray dolomitic limestone 90-10, specks calcite, marcasite 5, blende 1/2 [illegible] -239.5' [illegible]-237'

T.D.: 240.3', with steel tape.
Water: 75 feet.
Assays: Yes

Property Owner:

		lende	[illegible]	Galena
215	217	0.27	9.20	rare
217	220	0.52	1[illegible].19	"
[illegible]	[illegible]	0.32	11.77	"
222	[illegible]	1.[illegible]5	[illegible].56	"
225	227	1.15	7.70	"
227	230	1.12	[illegible].42	"
230	232	0.35	1.06	"

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

February 1, 1954

2/5/54 - Received

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for the month of December 1953, Docket [illegible] 2399, Contract Idm-[illegible] 339, The Eagle Picher Co., Galena, Illinois

Attached are two copies of the subject report for the month of December 1953, as processed for payment, for your files.

A. B. [illegible]

Attachments

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December 195 3 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent [redacted] Short Form Contracts:						
Drilling	2195.96	50,926.33	53,122.29	2195.96	50,926.33	53,122.29
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	352.28	10,822.56	11,174.84	352.28	10,822.56	11,174.84
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2548.24	61,748.89	64,297.13	2548.24	61,748.89	64,297.13

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Jan 13, 1954 *Payee THE EAGLE-PICHER CO.
Per A G Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1274.12 NH

Signature L A Hill
(Authorized Certifying Officer)

Date JAN 28 1954 Vou. No. 20
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. dm 2339 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 1/22/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature E. B. Needham Title Exec Officer Date JAN 25 1954

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

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OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1953 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address CARTHA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					33346.5			
Churn	foot	2548.24	1384	64,297.13	~~33346~~	1.928		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2548.24		64,297.13				191,23[illegible].78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan. 13, 1954 Operator THE EAGLE-PICHER CO.

Per A. C. Longmire Title Plant Accountant
A. C. Longmire

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

	Hole No.	Footage Drilled
Project No. 2		
Clarence P. Ralph	21	232
"	22	223
"	23	227
"	24	225
"	25	240
"	26	237
Total footage drilled December - -		-1384 Feet

Drilling cost - 1384 feet @ $1.565 per foot	$2,165.96
Plugging 6 holes @ $5.00 each	30.00
*Chief Geologist 1 month @ 6/14 of $425.00	182.14
*Field " 1 " @ 6/14 of $397.00	170.14
Total cost month of December, 1953	$2,548.24

*Note: 14 holes used as a normal month for salary overhead--December 6 holes --6/14 of salaries

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 3 1954

WORK PROGRESS REPORT

Docket 2399

Month December 1953

Contract Idm E-339

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Clarence P. Ralph	21	12/ 2/53	12/ 7/53	232
" " "	22	12/ 7/53	12/11/53	223
" " "	23	12/11/53	12/15/53	227
" " "	24	12/16/53	12/18/53	225
" " "	25	12/21/53	12/24/53	240
" " "	26	12/24/53	12/29/53	237

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Clarence P. Ralph	27	12/31/53	165	

TOTAL (completed)(~~accumulated~~) footage this period 1,384 To date 33,346.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to-date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of January 13, 19 54, totalling $ 64,297.13, has been carefully checked and approved by me.
$ 2548.24 Hb

APPROVED BY:

Wesley A. Rusch
Mining Engineer ~~xxxxxxxxxx~~

W. A. Bramlette
~~Mining Engineer~~ Geologist

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

January 5, 1954.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: Mr. A. B. WINDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of December, 1953, under Defense Minerals Exploration Contract, number Idm-L 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	21	Mineralization from 210 to 225 feet depth in Blue, Oil Rock and Clay Red horizons averaged 3.12% ZnS and 11.05% FeS_2. Loose and broken ground from 170 to 215 feet depth is unfavorable from mining standpoint.
Clarence P. Ralph,	22	Much limonite from 75 to 125 feet depth. Broken ground from 130 to 200 feet depth is unfavorable from mining standpoint.
Clarence P. Ralph,	23	Mineralization from 212½ to 220 feet depth in Oil Rock horizon averaged 5.30% ZnS and 8.90% FeS_2. This mineralization correlates in depth with that in drill holes 8 and 21 to form a small area of low grade ZnS mineralization.
Clarence P. Ralph,	24	Mineralization from 95 to 110 feet depth in top part of Drab horizon averaged 4.09% PbS and 15.97% FeS_2. Mineralization from 207.5 to 215 feet depth in Oil Rock and Clay Red horisons averaged 2.00% ZnS and 11.98% FeS_2. This hole was broken and loose from 95 to 207½ feet depth.

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	25	Good marcasite mineralization occurs from 160 to 230 feet depth and low grade blende mineralization from 225 to 230 feet depth in the Oil Rock horizon. Broken ground and small recovery from 165 to 215 feet depth is unfavorable from mining standpoint.
Clarence P. Ralph,	26	Low grade galena mineralization from 105 to 115 feet depth in top part of Drab horizon. Broken ground from 170 to 200 feet depth in bottom part of Drab horizon.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

Geologist: E. . Davis

DRILL RECORD
THE LOCK-KEY COMPANY

20

DRILL HOLE TRANSCRIPT OF THE NUTLINES
Defense Minerals Administration
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FEB 3 1954

Property Name: CLARENCE F. RALPH
Began: December 2,1953. Finished: December 7, 1953.
DRILL Owner: J. F. Robinson
Drill Runner: L. J. Brown
COLLAR ELEVATION: 985.57'

DEPTH		DESCRIPTION
0	5	Black soil
5	10	Buff dolomite, buff clay 60-40
10	15	Buff dolomite, buff clay 75-25
15	20	Coarse cuts: buff dolomite
20	40	Buff dolomite, few specks of limonite
40	50	Buff dolomite, trace of limonite
50	60	Buff limonite-speckled dolomite, limonite 1/2
60	70	Dark buff calcareous dolomite, limonite 2/10
70	80	Dark buff calcareous dolomite, limonite 1/10
80	85	Dark buff calcareous dolomite, trace of limonite
85	90	Buff and dark buff calcareous dolomite, few specks limonite
90	95	Gray-brown dolomite, dark buff dolomite 60-40, trace of calcite, few specks of limonite DRILL - 98'
95	100	Buffish-gray dolomite, dark buff dolomite, dark brown chert 90-9-1
100	105	Buffish-gray dolomite, brown chert 95-5, trace of gray chert, trace of limonite
105	110	Brown-buff dolomite, gray-brown chert 96-4, galena 2/10
110	115	Gray-brown dolomite, brown-buff dolomite, gray-brown chert 70-25-5, few specks marcasite, few specks of galena
115	120	Buffish-brown dolomite, tan chert 98-2, few specks of galena, specks of marcasite
120	130	Buffish-brown dolomite, gray chert 97-3, few specks of galena, specks of marcasite
130	135	Rather coarse cuts: Gray dolomite, buff dolomite, gray chert 90-5-5, few specks marcasite, specks of galena
135	140	Fine cuts: Brown-buff dolomite, light gray chert 97-3, trace of galena, few specks of marcasite
140	145	Buff dolomite, brown chert 92-8, thin trace of galena, trace of marcasite
145	150	Buff dolomite, gray dolomite, brown chert 95-4-1, few specks of galena, speck of marcasite
150	160	Buff dolomite, tan chert 99-1, thin trace of limonite, marcasite, thin trace of galena
160	170	Buff dolomite, tan chert 95-5, marcasite 2/10, few specks galena
170	180	Brown dolomite, gray marcasite-speckled chert and tan chert 88-12, marcasite 5
180	185	Brown dolomite, brown-gray chert 90-10, few specks dark brown chert, marcasite 2.
185	190	Brown dolomite, brown-gray chert 90-10, trace of tan and brown chert, marcasite 2
190	195	Brown dolomite, gray dolomite 80-20, buff clay 1, marcasite 4
195	200	Gray dolomite, buff dolomite 92-2, marcasite 6. GRAY-194'
200	202½	Gray dolomite, marcasite 10
202½	205	Brown-gray dolomite, marcasite 8
205	210	No recovery- broken ground BLUE - 210'

(CONTINUED ON NEXT PAGE)

DRILL HOLE NO. 21 CON'T.

Property Name: CLAIM OF P. HALEM

20

DEPTH		DESCRIPTION
210	212½	Gray dark-speckled dolomite, gray clay 90-10, some brown dolomite and brown-gray chert ravelling, marcasite 6, few specks of blende
212½	215	Gray dark-speckled dolomite, marcasite 10, blende 3/10
215	217½	Gray dark-speckled dolomite, gray clay 95-5, marcasite 7, blende 4 OIL ROCK- 217.5'
217½	220	Brown fossiliferous dolomitic limestone, marcasite 7, blende 9
220	222½	Green clay, brown fossiliferous dolomitic limestone 95-5, marcasite 1(?), blende 1 (?), few specks of phosphate
222½	225	Bentonite and fossils, marcasite 2/10, blende 1/10 CLAY- 220.1'
225	227½	Dark brown dolomite and light brown limestone, bentonite 95-5, few specks of chocolate brown shale, marcasite 10, blende 2 SHALE- 226.5'
227½	230	Light brown limestone, marcasite 4, blende 1/10 BOTTOM-230'
230	232½	Gray dark-speckled dolomitic limestone, marcasite 3, blende 4/10

T.D.H. 232.6 feet, with steel tape
Water: 60 feet
Assays: Yes
Location: South 21°, East 125 feet from Drill Hole # 9.

DRILLER'S REMARKS:

Loose ground 95 - 115; 135-145; 170-190
Broken ground 190-215
Soft ground 215-225

6¼" hole

ASSAYS

		Blende	FeS2	Galena
210	212½	0.15	11.55	0.12
212½	215	0.10	14.98	0.12
215	217½	5.35	11.77	0.12
217½	220	5.35	11.12	0.12
220	222½	5.00	8.98	0.12
222½	225	2.75	7.91	0.12

Property Name: CLARENCE J. RALPH
Started: Dec. 7, 1953. Finished: Dec.11,1953.
Drill Owner: J. P. Robinson
Drill Runner: L.J. Brown

DRILL HOLE No. 32

COLLAR ELEVATION: 979.07'

FROM	TO	LITHOLOGY
0	5	Soil
5	10	Brown-buff clay
10	15	Coarse cuttings: dark buff dolomite, trace of limonite and marcasite
15	20	Rather coarse cuttings: dark buff dolomite and buff dolomite, speck of marcasite
20	25	Rather coarse cuttings: buff dolomite and dark buff dolomite, speck of limonite
25	30	Buff dolomite, dark buff clay 60-40, speck of limonite
30	35	Buff dolomite, dark buff clay 80-20, trace of limonite
35	40	Buff dolomite, limonite 1/2
40	50	Buff dolomite, limonite 1/10
50	60	Buff dolomite, trace of limonite
60	70	Buff dolomite
70	75	Buff calcareous dolomite, limonite 1/2
75	80	Buff dolomite, limonite 10
80	85	Coarse cuttings: dark buff dolomite, limonite 35
85	90	Buff dolomite, limonite 60
90	95	Buff dolomite, dark buff clay, gray-brown & brown chert 90-9-1, limonite 20 — TRAP - 93'
95	100	Buffish-brown dolomite, gray-brown and marcasite-speckled chert 94-6, limonite 30, marcasite 1
100	105	Brown & buffish-brown dolomite, gray chert and marcasite-speckled chert 95-5, limonite 15, marcasite 5
105	110	Buff dolomite, -no chert - limonite 55, dark gray clay 2, trace of brown clay, marcasite 3/10
110	115	Buffish-brown dolomite, gray chert 90-10, limonite 10, marcasite 4/10
115	120	Brown-gray dolomite, gray chert 96-4, marcasite 0, limonite 4
120	125	Pale gray dolomite, light gray and white chert 85-15, marcasite 6, limonite 4
125	130	Buff dolomite and buffish-brown dolomite, gray and white chert 92-8, marcasite and limonite 2.
130	135	No recovery.
135	140	Buff dolomite, brown chert 70-30, marcasite 1
140	145	Buff dolomite, brown & gray chert 88-12, marcasite 2
145	150	Buff dolomite, brown & gray chert 94-6, marcasite 4
150	155	No recovery.
155	160	Buff dolomite, gray, tan & brown chert 95-5, marcasite & limonite 1
160	[illegible]	Brown marcasite-speckled dolomite, trace of tan chert, marcasite 5
[illegible]	[illegible]	Brown dolomite, gray, & tan chert 60-40, marcasite 3
[illegible]	[illegible]	Buffish-brown dolomite, gray & tan chert 80-20, marcasite 3
[illegible]	[illegible]	No recovery.
[illegible]	[illegible]	Brown-buff dolomite (from cuttings extra coarse), gray & white-gray chert 75-25, marcasite 3
[illegible]	[illegible]	No recovery. — GRAY - 195.5'

(CONTINUED ON NEXT PAGE)

Property name: CLARENCE A. WALL.

FROM	TO	DESCRIPTION
190	195	Buff dolomite, brown-gray dolomite 90-10, few specks of marcasite
195	197½	Buff dolomite, brown-gray dolomite 97-3, few specks dark-speckled dolomite, trace of dolomite, trace of marcasite BLUE-197.5'
197½	200	Gray dark-speckled dolomite, buff dolomite 70-30, marcasite 1/10
200	205	No recovery. OIL WOOK- 205.5'
205	207½	Brown dolomitic limestone, gray dark-speckled dolomite 70-20, some fossils, marcasite 2/10, a speck of blende
207½	210	Coarse cuts: brown dolomite and dark brown clayey limestone, some fossils, marcasite 1, few specks of blende
210	212½	Coarse cuts: dark brown dolomite, green clay 50-50, marcasite 3/10, trace of phosphate CLAY - 211.3'
212½	215	Bentonite and green shale, dark brown dolomite (coarse cuts) 80-20, marcasite 3/10 SHALE- 214.5'
215	217½	Dark brown dolomite, considerable sloughing from clay bed, marcasite 1/2
217½	220	No recovery. BOTTOM- 220.2'
220	223	Gray dolomitic limestone, dark brown dolomitic limestone 90-10, marcasite 3/10

Total: 223.0 feet, with steel tube
Water: 62 feet
Artesian: No

Location: 340 feet east from Drill Hole # 9.

Geologist: H. [illegible] Davis

DRILL RECORD
THE [illegible] - [illegible] HER COMPANY

DRILL HOLE NO. 23 PAGE 20

Property Name: CLARENCE P. RALPH
Started: Dec.11, 1953. Finished: Dec.15,1953.
Drill Owner: J. F. Robinson
Drill Runner: L. J. Brown COLLAR ELEVATION: 983.82'

DEPTH		DESCRIPTION
0	5	Black soil
5	10	Buffish brown clay
10	15	Brown-buff clay
15	35	Buff clay
35	40	Buff dolomite, limonite 1
40	50	Dark buff dolomite, trace of limonite
50	60	Dark buff dolomite, trace of limonite
60	65	Dark buff dolomite, limonite 1/2
65	75	Buff dolomite, limonite 1/2
75	85	Buff dolomite, limonite 2/10, speck of calcite
85	90	Buff dolomite, trace of limonite, speck of calcite
90	95	Buff dolomite, brown dolomite 80-20, trace of limonite DRAB-93'
95	100	Course cuts: iro m-buff dolomite, brown-buff chert 99-1, limonite 2
100	105	Buff dolomite, buffish-brown chert 95-5, limonite 1
105	110	Buff dolomite, buff clay, buffish-brown chert 82-10-8, limonite 1, thin trace of galena, (loose ground)
110	115	Buff dolomite, buffish-brown chert and dark brown chert 88-12, limonite 2/10, few specks of galena (loose ground)
115	120	Buff dolomite, brown chert 92-8, limonite 3/10, thin trace galena
120	125	Buff dolomite, buffish-brown chert 95-5, limonite 1/10, few specks of galena
125	130	Buff dolomite, gray-brown chert 80-20, trace of limonite, specks of galena
130	140	Buff dolomite, gray-brown chert 85-15, specks of limonite, speck of galena
140	150	Buff dolomite, gray-brown chert 88-12, few specks of limonite, few specks of marcasite
150	160	Buff dolomite, gray-brown chert and tan chert 92-8, specks of marcasite
160	170	Buff dolomite, gan and buff chert 97-3, specks of marcasite
170	175	Buffish-brown dolomite, gray chert 98-2, trace of brown clay, marcasite 2
175	180	Brown dolomite, gray,brown & tan chert 75-25, marcasite 5
180	185	Brown dolomite, gray-blue and tan chert 80-20, marcasite 3
185	190	Rather course cuts: brown dolomite, marcasite 1. GRAY - 190'
190	195	Brown-gray dolomite, buff dolomite ravelling 5, marcasite 1/2
195	197½	Brown-gray dolomite, gray clay 98-2, buff dolomite ravelling 3, marcasite 3/10
197½	200	Brown-gray dolomite, marcasite 4/10
200	202½	Brown-gray dolomite, marcasite 4
202½	205	Gray-brown dolomite, marcasite 7 BLUE - 205'
205	207½	Gray dark-speckled dolomite, gray clay 95-5, marcasite 7, blende 1/2
207½	210	Gray dark-speckled dolomite, marcasite 5, blende 3/10
210	212½	Gray dark-speckled dolomite (buff dolomite and clay sloughing 7) marcasite 4, blende 1/10 OIL ROCK - 212.5'

(CONTINUED ON THE NEXT PAGE)

DRILL HOLE NO. 23 CONT'D.

Property Name: CLAMPER, RALPH.

DEPTH		DESCRIPTION
212½	215	Brown fossiliferous dolomitic limestone, marcasite 6, blende 5
215	217½	Brown fossiliferous dolomitic limestone, trace of brown clay, marcasite 4, blende 2
217½	220	Brown fossiliferous dolomitic limestone, gray clay 95-5, marcasite 2, blende 1 CLAY - 220'
220	222½	Green clay, trace of marcasite, blende and phosphate
222½	225	Coarse cuts: Dark brown dolomite, gray clay 95-5, marcasite 1, few specks of blende (Per Driller) CLAYS - 224.0'
225	227½	Brown limestone and dolomitic limestone, gray dolomitic limestone 80-20, marcasite 4, blende 3/10 McGREGOR - 227.0' (Adjusted top 227.5')

T.D.H: 228.1 feet, with steel tape Soft ground: 205 - 225' (per driller)
Water: 67 feet
Assays: Yes.
Location: 100 feet south and 20 feet west from Drill Hole # 21.

ASSAYS

		Blende	FeS_2	Galena
212½	215	7.65	9.63	0.12
215	217½	4.55	7.91	0.12
217½	220	3.70	9.41	0.12

Geologist: H. [illegible] Davis

DETAIL RECORD
THE [illegible]-TIGER [illegible]Y

DRILL HOLE . . 24

Property Name: CLARENCE P. RALPH,
Started: Dec.16,1953. Finished: Dec. 18, 1953.
Drill Owner: J. F. Robinson
Drill Runner: L.J.Brown COLLAR ELEVATION: 977.01'

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DEPTH		DESCRIPTION
0	5	Soil
5	20	Buff clay
20	25	Buff dolomite, few specks of limonite (bouldery)
25	30	Buff dolomite, trace of limonite (bouldery)
30	40	Buff dolomite, limonite 3
40	50	Buff dolomite, limonite 5
50	60	Buff dolomite, limonite 1
60	70	Buff dolomite, trace of limonite
70	80	Buff dolomite (some coarse cuts), few specks of limonite
80	85	Buff dolomite (sample quite muddy with ochre clay), limonite 2, trace of galena DRAW - 88'
85	90	Coarse cuts: buff dolomite, brown chert 99-1, limonite (coarse) 8, few specks of marcasite, few specks of galena
90	95	Coarse cuts: buff dolomite, gray-brown chert 96-4, limonite 1, speck of galena
95	100	Coarse cuts: buff dolomite, dark brown chert and buff chert 80-20, limonite 1, galena 3
100	105	Coarse cuts: buff dolomite, dark brown chert and buff-brown chert 75-25, limonite 3, galena 1
105	110	Buff dolomite, buff-brown, dark brown & tan chert 90-10, limonite 5, galena 1/2
110	115	Buff dolomite, buff-brown and dark brown chert 93-7, limonite 1, galena 2/10
115	120	Buff dolomite, gray and dark brown chert 95-5, limonite 1/2, trace of galena
120	130	Coarse cuts: pale buff dolomite, light gray and white chert 92-8, limonite 2/10, galena (ravelling) 1/10
130	135	No Recovery
135	140	Buff dolomite, gray chert 98-2, dark buff clay and gray clay 5%, limonite 4, galena 7/10 (ravelling ?)
140	145	Buff dolomite, gray and brown chert 92-8, dark buff clay 2, marcasite and limonite 10, trace of galena
145	155	Buff dolomite, gray chert 97-3, marcasite & limonite 12, few specks of galena
155	165	Brown-gray dolomite, light gray chert 95-5, marcasite 20, few specks of galena
165	170	No Recovery
170	175	Pale brown-gray dolomite, light gray and white chert and tan chert 88-12, marcasite & limonite 10, few specks of galena
175	180	Practically no recovery - only 4 coarse pieces of pale brown-gray dolomite
180	185	Pale brown-gray dolomite, few specks chert, marcasite 6
185	190	Pale brown-gray dolomite, marcasite 5 GRAY - 190'
190	192½	Light gray dolomite, marcasite 4
192½	195	Gray dolomite, marcasite 3
195	197½	Gray dolomite, marcasite 7
197½	207½	No Recovery TOP OF BLUE- 202.5' (?)

(CONTINUED ON NEXT PAGE)

Geologist: H. [illegible] Davis

HOLE # 2.

DRILL RECORD

DRILL HOLE RECORD CONT.

20

Property Name: CLARENCE E. RALPH.

DEPTH		DESCRIPTION
207½	210	Gray dark-speckled dolomite, gray clay 95-5, marcasite 7, blende 1
210	212½	Brown fossiliferous dolomitic limestone, dark brown shaly limestone 98-2, marcasite 10, blende 2 OIL ROCK @ 210'
212½	215	Brown fossiliferous dolomitic limestone, gray clay 80-20, marcasite 8, blende 3 TOP OF CLAY BED- 214.5'
215	217½	Bentonite
217½	220	Dark brown dolomitic limestone, trace of calcite, marcasite 5, blende 1/2, a speck of galena GLASS - 219.0'
220	222½	Light blue and tan limestone, trace of chocolate brown shale, marcasite 7, blende 1/2
222½	225	Gray dolomitic limestone, marcasite 3, blende 1/10, speck of galena McMAHON - 222.5'

Location: 200 feet South and 65 feet East from Drill Hole # 21.
T.D.H: 225.5 feet, with steel tape
Water: 60 feet
Assays: Yes

DRILLER'S REMARKS:

Loose streak 79 to 81 feet
Broken & loose 95 to 207½
Soft ground 207½ to 217½

ASSAYS

		Blende	FeS2	Galena
85	90	0.10	20.11	0.85
90	95	0.10	13.26	0.18
95	100	0.10	15.83	7.09
100	105	0.10	16.26	3.08
105	110	0.10	15.83	3.09
207½	210	1.90	12.41	0.12
210	212½	1.85	10.70	0.13
212½	215	2.25	12.84	0.13

DRILL LOG
[illegible] - [illegible] COUNTY

DRILL HOLE NO. 25

Property Name: CLARENCE E. ASH
Started: Dec. 21, 1953. Finished: Dec. 24, 1953.
Drill Owner: J. F. Robinson
Drill Runner: L. Brown COLLAR ELEVATION: 990.68'

DEPTH		DESCRIPTION
0	8	Soil
8	15	Buff dolomite
15	40	Buff dolomite & buff clay (coarse cuts)
40	60	Buff dolomite, specks of limonite
60	80	Buff dolomite, few specks of limonite
80	85	Buff dolomite, brown dolomite 95-5, trace of limonite, specks of marcasite
85	90	Brown dolomite, buff dolomite 90-10, few specks of marcasite
90	95	Brown dolomite, trace of marcasite
95	100	Brown dolomite, speck of calcite, marcasite 1/10 DRAK - 102.5'
100	105	Buffish-brown dolomite, brown & gray-brown chert 95-5, marcasite 2/10
105	110	Buffish-brown dolomite, gray and white chert 80-20, marcasite 2/10, galena traces
110	115	Brown dolomite (some marcasite-speckled), brown & tan chert 96-4, marcasite 3/10, few specks of galena
115	120	Buffish-brown dolomite, gray-brown & tan chert 94-6, marcasite 1/2
120	130	Brown dolomite, tan chert 95-5, marcasite 3/10
130	140	Buffish-brown dolomite, gray & white chert 80-20, trace of dark brown shale, marcasite 2/10, galena 2/10
140	150	Light brown-gray dolomite, light gray & white chert 88-12, marcasite 4/10
150	160	Brown dolomite, gray chert 92-8, marcasite 1/2
160	170	Buffish-brown dolomite, gray and tan chert 88-12, marcasite 5
170	180	No recovery
180	185	Brown dolomite, few specks of tan chert, marcasite 12
185	190	No recovery
190	195	Dark brown dolomite, gray marcasite-speckled chert 90-10, marcasite 18
195	200	Dark brown dolomite, gray and brown chert 94-6, marcasite 20
200	205	Gray dolomite, brown dolomite 70-30, marcasite 15 GRAY- 201.5'
205	207½	Brown-gray dolomite, marcasite 5
207½	210	Brown-gray dolomite, marcasite 7
210	212½	Few extra coarse cuts: brown-gray dolomite, marcasite 12
212½	215	Brown-gray dolomite, marcasite 22
215	217½	Brown-gray dolomite, marcasite 3 BOOK- 217.5'
217½	220	Gray dark-speckled dolomite, marcasite 6
220	222½	Gray and brown-gray dark-speckled dolomite, marcasite 5
222½	225	Brown dolomitic limestone, gray dark speckled dolomite 70-30, buff dolomite 10, marcasite 5, OIL ROCK - 223.3'
225	227½	Brown fossiliferous dolomitic limestone, trace of dark brown shale, trace of gray clay, marcasite 4, blende 2
227½	230	Brown fossiliferous dolomitic limestone, some brown clay and little gray clay, brown shale 1, marcasite 3, blende 2 CLAY-231'
230	232½	Green clay, brown fossiliferous dolomitic limestone 60-40, trace of phosphate, marcasite 2, blende 1 GLASS -234.5'
232½	235	Gray clay, dark brown sugary dolomite 80-20, marcasite 3, blende 2/10

(CONTINUED ON NEXT PAGE)

Property Name: CL[illegible] [illegible]

METER		DESCRIPTION
235	237½	Gray dolomitic limestone, dark brown sugary dolomite 70-30, marcasite 2, blende 2/10 GROUNDWATER- 235.7'
237½	240	Gray dolomitic limestone, marcasite 4, blende 3/10

T.D.: 240 feet, with steel tape
Water: 73 feet.
Assays: Yes
Location: Loc."3"; 238 feet East and 12 feet North from Sta.#175.

Broken ground and small recoveries 165-215. Soft bottom section.

ASSAY

	Blende	FeS_2	Galena
225 227½	6.42	14.33	0.12
227½ 230	3.76	10.27	0.12
230 232½	3.10	9.84	0.12

Geologist: N. F. Davis

DRILL RECORD
THE [illegible]-FISHER COMPANY

DRILL HOLE No. 26

20

Property Name: CLARENCE F. RALPH
Started: Dec. 24, 1953. Finished: Dec. 29, 1953.
Drill Owner: J. F. Robinson
Drill Runner: L.J.Brown

COLLAR ELEVATION: 990.40

DEPTH		DESCRIPTION
0	5	Black soil
5	10	Buff clay, buff dolomite 95-5
10	15	Buff dolomite (coarse cuts), buff clay 80-20, a speck marcasite
15	20	Buff dolomite (coarse cuts), buff clay 90-10, speck of marcasite
20	25	Buff dolomite
25	30	Dark buff dolomite, few specks of galena
30	35	Dark buff dolomite, few specks limonite, specks of galena
35	40	Dark buff dolomite, few specks limonite, few specks of galena
40	50	Dark buff dolomite, few specks of galena
50	60	Dark buff dolomite, few specks of galena
60	70	Dark buff dolomite, few specks of galena
70	80	Dark buff dolomite, brown-gray dolomite 90-10, few specks galena
80	85	Brown dolomite, few specks of marcasite
85	90	Brown dolomite, few specks of marcasite
90	95	Brown dolomite, trace of marcasite
95	100	Brown dolomite, marcasite 4/10
100	105	Brown dolomite, gray-brown chert 97-3, marcasite 1/2 DRAB-102.5'
105	110	Dark brown dolomite, gray-brown chert 92-8, marcasite 2/10, galena ½
110	115	Dark brown dolomite, gray marcasite-speckled chert and brown chert 90-10, marcasite 6, galena 2
115	120	Dark brown dolomite, gray marcasite-speckled chert and brown chert 96-4, marcasite 3, galena 1/2
120	125	Brown dolomite, gray chert 98-2, marcasite 3/10, few specks galena
125	130	Brown dolomite, gray chert 95-5, marcasite 3/10, few specks galena
130	140	Brown-gray dolomite, grey & white chert 92-8, marcasite 2/10
140	150	Brown-gray dolomite, gray chert 96-4, marcasite 2/10
150	160	Brown-gray dolomite & brown dolomite, gray chert 99-1, marcasite 1/10
160	170	Brown dolomite, tan chert 98-2, trace of marcasite
170	180	Brown dolomite, gray & tan chert 99-1, marcasite 7/10
180	190	Brown dolomite, gray marcasite-speckled chert 92-8, marcasite 3
190	200	Brown dolomite, tan and brown chert 97-3, marcasite 4
200	205	Gray dolomite, brown dolomite 80-20, marcasite 2 GRAY- 201'
205	207½	Gray dolomite, trace of gray clay, marcasite 4
207½	210	Gray-brown dolomite, marcasite 3
210	212½	Brown dolomite, marcasite 1, few specks of blende
212½	215	Brown dolomite, gray coarse grained dolomite with few dark specks 90-10, some grey chert, apparently revelling, marcasite 7/10, few specks of blende BLUE- 214.8'
215	217½	Gray dark-speckled dolomite, some brown dolomite and gray chert ravellings, marcasite 3/10, trace of blende
217½	220	Gray dark-speckled dolomite, some brown dolomite and gray chert ravelling, gray clay 2, marcasite 4/10, few specks blende OIL-220'
220	222½	Light brown fossiliferous limestone, marcasite 2/10, blende 1/10
222½	225	Brown fossiliferous limestone, brown shaly limestone 90-10, marcasite 6/10, blende 2/10
225	227½	Brown fossiliferous limestone, brown clay 95-5, marcasite 4/10, few specks of blende, speck of calcite CLAY BED- 227.5'

(CONTINUED ON NEXT PAGE)

DRILL HOLE NO. 26 CON'T.

20

Property Name: CLARENCE Jr. RALPH

DEPTH		DESCRIPTION
227½	230	Green clay
230	232½	Dark brown dolomite (coarse cuts), green clay 95-5, marcasite 1/10, speck of calcite GLASS ROCK- 231.5'(per driller
232½	235	Dark brown dolomite and little borwn dolomitic limestone, marcasite 2/10, speck of calcite
235	237	Gray dolomitic limestone, few specks brown dolomite, marcasite 1/10, a speck of blende McGREGOR - 235'

T.D. : 237.4 feet, with steel tape
Water: 73½ feet
Assays: Yes (some galena 105-115)
Broken ground 170-200
Soft ground 215-230
6½ inch hole.
Location: North 62° West 100 feet from Drill Hole #23.

ASSAY

	Blende	FeS_2	Galena
108 110	Nil	3.63	0.85
110 118	Nil	5.86	0.83

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Defense Minerals Administration
RECEIVED
1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1953, 1953 Docket No. DMEA 2399 Contract No. Idm 8339
Operator's Name THE EAGLE PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 191,230.78 Government Participation 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	$ 964.96	49,961.37	50,926.33	964.96	49,961.37	50,926.33
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	176.14	10,646.42	10,822.56	176.14	10,646.42	10,822.56
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 1141.10	60,607.79	$61,748.89	$1141.10	60,607.79	$61,748.89

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Nov. 18, 1953 Payee The Eagle-Picher Co.

Per A G Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 570.55

Signature L. A. Hill
(Authorized Certifying Officer)

Date DEC - 1 1953 Vou. No. 15
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMA 2-339 in accordance with the terms of the contract.

Signature Wesley A. Brook Title Mining Engineer Date 11/24/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title [illegible] Date 11/30/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 3 - 1953

15

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1953 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	$1141.10	607	$61,748.89	31962	1.932		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$1141.10		$61,748.89				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Nov. 18, 1953 Operator The Eagle-Picher Co.

Per A. C. Dompkins Title Plant Accountant

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

November 16, 1953.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM

Gentlemen:

The following is our summary of the drill holes for November, 1953 which were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin under Defense Minerals Exploration Contract number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	18	Rich marcasite mineralization from 200 to 210 feet depth in Blue and Oil Rock horizons. Fair marcasite from 210 to 222 feet depth. More drilling will be done close to this drill hole.
Clarence P. Ralph,	19	Fair marcasite mineralization from 140 to 160 feet depth. This was a firm hole.
Clarence P. Ralph,	20	Low grade marcasite mineralization with traces of blende from 45 to 137½ feet depth. This hole indicates that the east end of the Calvert-Ralph orebody is approximately 100 feet east of drill hole number 15.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - NOVEMBER, 1953

	Hole No.	Footage Drilled
Project No. 2		
Clarence P. Ralph	18	222
	19	200
	20	185
Total footage drilled - November		607 feet

Drilling cost 607 feet @ $1.565 per foot	$ 949.96
Plugging three holes @ $5.00 each	15.00
* Chief Geologist 1 month @ 3/14 of $425.00	91.07
* Field " 1 " @ 3/14 of $897.00	85.07
Total cost month of November, 1953	$1,141.10

* Note:--14 holes used as a normal month for salary overhead. November 3 holes--3/14 of salaries

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

November 6,1953.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of October, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P.Ralph,	10	Low grade marcasite mineralization from 175 to 182.5 feet depth.
Clarence P. Ralph,	11	Assays from 130 to 170 feet depth averaged 7.09% ZnS and 23.44% FeS_2 and from 170-180 feet depth averaged 1.06% ZnS and 18.93% FeS_2.
Clarence P. Ralph,	12	Assays from 95 to 110 feet depth averaged 4.49% ZnS and 5.27% FeS_2, and from 162.5 to 172.5 feet depth averaged 9.22% ZnS and 17.28% FeS_2. Between this hole and drill hole number 33 on the Frances Calvert lease the orebody is 165 feet wide.
Clarence P. Ralph,	13	Low grade marcasite mineralization from 80 to 160 feet depth and traces of galena from 140 to 160 feet depth.
Clarence P. Ralph,	14	Fair marcasite mineralization from 70 to 165 feet depth
Clarence P. Ralph,	15	Rich blende mineralization from 150 to 172.5 feet depth. Ground broken and open from 140 to 175 feet depth. Mineralization below 177.5 feet depth is believed to have largely caved from above.

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	16	Rich marcasite mineralization from 120 to 185 feet depth. Fair to low grade blende mineralization from 150 to 165 feet depth. Mineralization below 165 feet depth is believed to have largely caved from above. Loose open hole from 120 to 160 feet depth.
Clarence P. Ralph,	17	Fair marcasite mineralization from 130 to 160 feet depth. Traces of blende from 165 to 180 feet depth.

15

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER EMEA CONTRACT - OCTOBER, 1953

	Hole No.	Footage Drilled
Project No. 2		
Clarence P. Ralph	10	210
"	11	182
	12	200
"	13	202
	14	202
"	15	197
	16	185
"	17	190
Total footage drilled October		1568 feet

Drilling cost - 1568 feet @ 1.565 per foot	$2,453.92
Plugging 8 holes @ $5.00 each	40.00
* Chief Geologist 1 month 8/14 of $425.00	242.86
* Field " 1 " 8/14 of $397.00	226.86
Total cost month of October, 1953	$2,963.64

* Note:-14 holes used as a normal month for salary overhead---October 8 holes--8/14 of salaries

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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DEC 1953

WORK PROGRESS REPORT

Docket 2399 Month November

Contract Idm E-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Clarence P. Ralph	18	10/30/53	11/ 5/53	222
" " "	19	11/ 5/53	11/ 7/53	200
" " "	20	11/ 9/53	11/11/53	185

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
		None		

TOTAL (completed)(~~accrued~~) footage this period 607 To date 31,962.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of November 18, 19 53, totalling $ 61748.89, has been carefully checked and approved by me.

APPROVED BY:

Wesley A. Drost
Mining Engineer ~~or Geologist~~

W. A. Pennington
~~Mining Engineer or~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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DEC 1953

December 7, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for the months of October and November 1953, Docket DMEA 2399, Contract Idm-E-339, The Eagle Picher Co., Galena, Illinois

Attached are two copies of the subject report for the months of October and November 1953, as processed for payment, for your files.

A. B. NEEDHAM

Attachments

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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DEC 9 - 1953

Month of October, 1953 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Short Form~~ Contracts:						
Drilling	2493.92	47467.45	49961.37	2493.92	47467.45	49961.37
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	469.72	10176.70	10646.42	469.72	10176.70	10646.42
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2963.64	57644.15	60607.79	2963.64	57644.15	60607.79

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Nov. 16, 1953 *Payee The Eagle-Picher Co.

Per A C Simpkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1481.82 AG

Signature L. A. Hice
(Authorized Certifying Officer)

Date NOV 30 1953 Vou. No. 15
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DME 339 in accordance with the terms of the contract.

Signature Wesley A. Pauch Title Mining Engineer Date 11/24/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature O. B. Weatherson Title Ex. Off. Date 11/25/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
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15

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195 3 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	2963.64	1568	60607.79	31355	1.933		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2963.64		60607.79				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Nov. 16, 1953 Operator The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
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WORK PROGRESS REPORT

Docket 2399

Contract Idm E-339

Month October

Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Clarence P. Ralph	10	10/ 1/53	10/ 5/53	210
" " "	11	10/ 6/53	10/ 8/53	182
" " "	12	10/ 8/53	10/13/53	200
" " "	13	10/13/53	10/15/53	202
" " "	14	10/15/53	10/20/53	202
" " "	15	10/20/53	10/23/53	197
" " "	16	10/23/53		185
" " "	17	10/28/53	10/30/53	190

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Clarence P. Ralph	18	10/30/53	70	

TOTAL (completed)(~~accumulated~~) footage this period 1568 To date 31,355.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of November 16, 19 53, totalling $ 60,607.79, has been carefully checked and approved by me.

APPROVED BY:

Wesley A. Brant

Mining Engineer ~~or Geologist~~

M. A. Bissmyhton

~~Mining Engineer or~~ Geologist

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September 1953 Docket No. DMEA 2399 Contract No. Ida 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address OGDEN, ILLINOIS
Contract Amount, $ 191,230.78 Government Participation: 20 % Amount, $ 95,619.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent [redacted] Contracts:						11/17/53 - J.W. ABB.
Drilling	2493.62	44973.83	47467.45	2493.62	44,973.83	47,467.45
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	411.00	9765.70	10176.70	411.00	9,765.70	10,176.70
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2904.62	54739.53	57644.15	2904.62	54,739.53	57,644.15

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Oct. 19, 1953 *Payee THE EAGLE-PICHER CO.

Per A. G. Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1452.31

Signature L. A. Hill
(Authorized Certifying Officer)

Date OCT 29 1953 Vou. No. 12
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMEA339 in accordance with the terms of the contract.

Signature Wesley A Brook Title Mining Engineer Date 10/28/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature J. B. Woodham Title Ex Off Date 10/29/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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NOV 9 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

12

Month of September 1953 Docket No. DMEA 2399 Contract No. 14n 4 339
Operator's Name THE EAGLE-PICHER COMPANY Minerals Lead & Zinc
Address GALENA, KANSAS

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					29787.5			
Churn	Foot	2904.62	1571	57,644.15	29787.5	1.933		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		2904.62		57,644.15				191,290.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct. 19, 1953 Operator THE EAGLE-PICHER CO.

Per A. G. Tompkins Title Plant Accountant

Remarks:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator; since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

WORK PROGRESS REPORT

Docket 2399 Month September 1953

Contract Idm E-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F. Calvert	44	8/31/53	9/ 3/53	243
" "	45	9/ 4/53	9/ 9/53	220
" "	46	9/ 9/53	9/ 11/53	207
" "	47	9/14/53	9/16/53	202
" "	48	9/17/53	9/22/53	215
Clarence P. Ralph	8	9/23/53		242
" " "	9	9/25/53	9/30/53	242

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

- None -

TOTAL (completed) ~~(accumulated)~~ footage this period 1571 To date 29,787.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of October 19, 19 53, totalling $ 57,644.15 to date, has been carefully checked and approved by me.
2,904.62 this voucher

APPROVED BY:

Wesley A. Brook
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 30 1953

September 28, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for August 1953
Docket DMEA-2399, Contract Idm E-339, The Eagle Picher Co.

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments - 2

cc: C. E. Dutton
W. A. Grosh
Region V
Files
Day Files

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 30 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1953 Docket No. DMEA 2399 Contract No. Idm 8 339
Operator's Name The Eagle Picher Co. Minerals Lead & Zinc
Address Galena, Illinois
Contract Amount, $191,230.78 Government Participation: 50 % Amount, $95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling	2141.18	42832.65	44,973.83	2141.18	42832.65	44,973.83
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	352.28	9413.42	9,765.70	352.28	9413.42	9,765.70
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2493.46	52,246.07	54,739.53	2493.46	52,246.07	54,739.53

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Sep 14, 1953 *Payee The Eagle-Picher Co.
Per A G Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1246.73 AG

Signature L. A. Hill
(Authorized Certifying Officer)

Date SEP 28 1953 Vou. No. 9
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 9-24-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature D. B. Needham Title Ex Off Date 9/26/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 30 1953

9

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1953 Docket No. DMEA 2399 Contract No. Tom 8339
Operator's Name EAGLE-PICHER COMPANY Minerals Lead & Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					* 28216.5			
Churn	Foot	2493.46	1349	54,739.53	28216	1.940		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2493.46		54,739.53				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 14, 1953 Operator The Eagle-Picher Co.

Per A G Tompkins Title Plant Accountant
A. G. Tompkins

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

* Previous units to date = 26867.5
+1349.0
28216.5

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - AUGUST, 1953

	Hole No.	Footage Drilled
Project No. 2		
Francis M. Calvert	38	225
	39	230
	40	210
	41	227
	42	230
	43	227
Total footage drilled in August		1349 ft

Drilling Cost--1349 feet @ $1.565	$2,111.18
Plugging six holes @ $5.00 each	30.00
* Chief Geologist 1 mo. @ 6/14 of $425.00	182.14
* Field " 1 mo. " $397;00	170.14
Total Cost month of August, 1953	$2,493.46

* Note: 14 holes used as a normal month for Salary overhead. August-6 holes--6/14 of salaries

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

September 1,1953

United States Department of Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of August, 1953, under Defense Minerals Exploration Contract, number Idm-# 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	38	Fair blende mineralization in Oil Rock and Clay bed horizons for a thickness of 10 feet. Rich marcasite mineralization from 207½ to 225 feet depth.-- Oil Rock to McGregor horizons.
Francis M. Calvert,	39	Fair marcasite mineralization from 140 to 215 feet depth. Traces and low grade blende mineralization at intervals from 197.5 to 230 feet depth- Gray to McGregor horizons.
Francis M. Calvert,	40	Low grade marcasite mineralization from 100 to 115 feet depth and from 155 to 170 feet depth. Traces of blende from 200-210 feet depth in Oil Rock and Clay Bed horizons.
Francis M. Calvert,	41	Rich marcasite mineralization from 165-225 feet depth. Little blende mineralization in Gray horizon from 205-210 feet depth.
Francis M. Calvert,	42	Fair marcasite mineralization from 105 feet, near top of Drab, to 230 feet depth at bottom of hole. Low grade blende mineralization at 155-165 feet depth in Drab horizon. Traces of blende in Gray horizon.

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	43	Low grade marcasite mineralization from 140 - 192.5 feet depth. Traces of blende in Oil Rock, Clay Bed, and Glass Rock horizons.

9

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 30 1953

WORK PROGRESS REPORT

Docket 2399

Month August 1953

Contract Idm-E339

Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F. Calvert	38	8/ 1/53	8/ 5/53	225
" "	39	8/ 5/53	8/ 7/53	230
" "	40	8/ 8/53	8/11/53	210
" "	41	8/11/53	8/14/53	227
" "	42	8/14/53	8/17/53	230
" "	43	8/17/53	8/20/53	227

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
F. Calvert	44	8/29/53	105	

TOTAL (completed)(~~accrued~~) footage this period 1349 To date 28,216.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of Sept. 14, 19 53, totalling $ 2493.46, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
(Received)
SEP 4 - 1953

September 2, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2399, Contract Idm E-339, Eagle-Picher Co. Operator's Monthly Report and Voucher for July 1953

Attached are two copies of the subject report, as processed for payment, for your files.

W. E. Lewis

W. E. Lewis
Acting for A. B. Needham
Executive Officer, Field Team
Region V

Attachment - 2

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 4 1953

Crash

OPERATOR'S MONTHLY REPORT AND VOUCHER

6

Month of July, 1953, 195____ Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name The Eagle-Picher Co.
Address P. O. Box 1040, Galena, Illinois
Minerals Lead & Zinc
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) [redacted] Short Form } Contracts:						
Drilling	2265.13	40,567.52	42,832.65	2265.13	40,567.52	42,832.65
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	411.00	9,002.42	9,413.42	411.00	9,002.42	9,413.42
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2676.13	49,569.94	52,246.07	2676.13	49,569.94	52,246.07

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8/19/53 *Payee The Eagle-Picher Co.
Per A C Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1338.06 H6
Signature L. A. Hull
(Authorized Certifying Officer)
Date SEP - 1 1953 Vou. No. 6
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 1dm E 332 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 8-21-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature O. B. Needham Title Ex Off Date 8/27/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 4 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1953 Docket No. DMEA 2399 Contract No. Idm R 339

Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc

Address P. O. Box 1040 Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Foot	2676.13	1425	52,246.07	26867.5	1.945		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		2676.13		52,246.07				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Aug. 15, 1953 Operator The Eagle-Picher Co.

Per A. G. Tompkins Title Plant Accountant

A. G. Tompkins

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS 6

DRILLING UNDER DMEA CONTRACT - JULY, 1953

	Hole No.	Footage Drilled
Project No. 2		
Francis M. Calvert	33	185
"	34	218.5
"	35	205
"	36	207.5
"	37	218
Clarence P. Ralph	6	180
"	7	211
Total footage drilled in July		1425

Drilling Cost--1425 ft @ $1.565 per foot	$2,230.13
Plugging 7 holes @ $5.00 each	35.00
* Chief Geologist 1 mo. 7/14 of $425.00	212.50
* Field " 1 mo. 7/14 of 397.00	198.50
Total Cost month of July, 1953	$2,676.13

* Note: 14 holes used as a normal month for salary overhead. July-7 holes--7/14

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

August 4, 1953.

United States Department of Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. E. KREDNAM

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of July, 1953, under Defense Minerals Exploration Contract, number Idm-R 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	33	Rich ore. Average of assays for samples from 115 to 170 feet depth is 10.76 per cent blende. Hole caved badly from the Blue horizon and salted the cuttings from 170 to 185 feet depth. Assays below 170 feet are unreliable.
Francis M. Calvert,	34	Marcasite mineralization from 150 to 205 feet depth. No blende. Broken ground and loose from 140 to 195 feet.
Francis M. Calvert,	35	Good blende mineralization from 170 to 177.5 feet depth. Good marcasite mineralization from 145 to 185 feet depth.
Francis M. Calvert,	36	Good blende mineralization in Gray horizon from 150 to 185 feet depth. Hole caved badly in Gray horizon and revellings salted hole to bottom. Hole broken and loose from 105 to 107.5 feet depth.
Francis M. Calvert,	37	Fair blende mineralization in Oil Rock horizon from 205 to 212 feet depth. Fair marcasite mineralization from 100 to 215 feet depth.

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	6	Mineralization from 130 to 160 feet depth averages 3.24 per cent blende. Thin beds in Oil Rock and Glass Rock horizons.
Clarence P. Ralph,	7	Fair marcasite mineralization with traces of blende from 170 to 195 feet depth. Thin beds in Oil Rock and Glass Rock horizons.

Sincerely,

THE EAGLE-PICHER COMPANY.

BY. J. P. Lyden

J. P. Lyden,
Chief Geologist
Mining & Smelting Div.

JPL/tp.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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SEP 4 1953

WORK PROGRESS REPORT

Docket 2399 Month July 1953

Contract Idm-E 339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F. Calvert	33	6/30/53	7/ 6/53	185
" "	34	7/14/53	7/17/53	218½
" "	35	7/17/53	7/22/53	205
" "	36	7/22/53	7/27/53	207½
" "	37	7/27/53	7/29/53	218
C. Ralph	6	7/ 6/53	7/ 8/53	180
" "	7	7/ 9/53	7/13/53	211

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

None in Progress.

TOTAL (completed)(~~a~~ scratch one) footage this period 1425 To date 26,867½

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of August 15, 19 53, totalling $ 2676.13, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder

Mining Engineer or ~~Geologist~~

W. A. Bassett

~~Mining Engineer or~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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AUG - 5 1953

July 31, 1953

Betty
8/5/53. Received by Jwa.

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for June 1953
Contract Idm E-339, Docket DMEA-2399, Eagle-Picher Co.

Attached are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments - 2

cc: Carl E. Dutton
Wesley Grosh - (att)
Files
Region V
Day Files

Form MR-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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OPERATOR'S MONTHLY REPORT AND VOUCHER

3

Month of June 195 3 Docket No. DMEA 2599 Contract No. KDM 8939
Operator's Name FOOTE-PICHER CO. Minerals Lead & Zinc
Address GILMORE, IDAHO
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						8/4/53 - J.W.A.
Drilling	2833.83	37733.69	40,567.52	2833.83	37,733.69	40,567.52
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	528.42	8474.00	9,002.42	528.42	8,474.00	9,002.42
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3362.25	46207.69	49,569.94	3362.25	46,207.69	49,569.94

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 20, 1953 Payee The Foote-Picher Co.

Per A G Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1681.12 #6

Signature L. A. Hill
(Authorized Certifying Officer)

Date JUL 30 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Ida-E339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 7-28-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title [illegible] Date 7/29/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Defense Minerals Administration
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3

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June, 1953, 195.. Docket No. DMEA 6399 Contract No. Idm 5339
Operator's Name THE EAGLE-PICHER CO Minerals Lead & Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Foot	3362.25	1762	849,969.94		1.948		
Auger					65,482.5			
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		3362.25		849,969.94				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3362.25		849,969.94				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date July 20, 1953 Operator The Eagle-Picher Co.

Per A G Zumpfkins Title Plant Accountant

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT JUNE, 1953

	Hole No.	Footage Drilled
Project No. 2		
Francis M. Calvert	24	177.5
"	25	195
"	26	195
"	27	210
"	28	202.5
"	29	220
"	30	225
"	31	175
"	32	182
Total footage drilled-June		1782

Drilling Cost--1782 ft. @ $1.565 per foot	$2,788.83
Plugging 9 holes @ $5.00	45.00
*Chief Geologist one month 9/14 of $425.00	273.21
*Field " " " 397.00	255.21
Total Cost month of June, 1953	$3,362.25

*14 holes used as a normal month for salaryoverhead

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

July 7th., 1953.

United States Department of Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A.B.NEEDHAM

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of June, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	24	There is good marcasite mineralization from 50 feet to 75 feet depth that average 11.97% FeS_2, traces of blende averaged 0.06% and low grade galena averaged 0.30% PbS. This drill hole is in the north outer edge of the mineralized area.
Francis M. Calvert,	25	There is good marcasite mineralization from 115 feet to 165 feet depth that was estimated to average 9.9% FeS_2. This drill hole is approximately 75 feet south of the ore body.
Francis M. Calvert,	26	This drill hole is on the north edge of the orebody. From 65 feet to 125 feet depth the assays average 0.66% blende, 11.14% FeS_2 and 0.11% PbS, and from 17[illegible] feet to 187.5 feet depth the assays average 1.37% blende, 8.71% FeS_2 and 0.15% galena.

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	27	In the upper part of the Drab horizon from 80 feet to 90 feet depth the blende mineralization averages 9.04% and the galena 0.31%. In the Gray, Blue and Oil Rock horizons from 165 feet to 192.5 feet depth the blende averages 4.10% and the galena 0.13%.
Francis M. Calvert,	28	In the lower part of the Drab and the top half of the Gray horizons from 160 feet to 175 feet depth the blende averages 1.78% and the galena 0.09%.
Francis M. Calvert,	29	Good blende mineralization in Oil Rock horizon. Rich marcasite with some blende from 145 feet to 175 feet depth. Blende in Glass Rock and McGregor horizons believed to be ravelling from Oil Rock horizon.
Francis M. Calvert,	30	Marcasite mineralization from 165 feet to 185 feet depth estimated to average 5.7% FeS_2. No blende mineralization.
Francis M. Calvert,	31	Good marcasite mineralization from 90 feet to 162.5 feet depth, with low grade blende mineralization.
Francis M. Calvert,	32	Rich blende in Blue and Oil Rock horizons. Blende in McGregor horizon believed to be ravelling from above.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month June 1953

Contract Idm E-339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F.M. Calvert	24	5/28/53	5/30/53	177½
" " "	25	6/ 1/53	6/ 3/53	195
" " "	26	6/ 4/53	6/ 8/53	195
" " "	27	6/ 9/53	6/11/53	210
" " "	28	6/11/53	6/15/53	202½
" " "	29	6/16/53	6/18/53	220
" " "	30	6/18/53	6/23/53	225
" " "	31	6/23/53	6/25/53	175
" " "	32	6/26/53	6/30/53	182

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
F. M. Calvert	33	6/30/53	30	

TOTAL (completed) footage this period 1782 To date 25,442½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of July 20, 19 53, totalling $ 3362.25, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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JUN 26 1953

Dale
Greenwald
Betty

June 24, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for May 1953
Docket DMEA2399, Contract Idm E-339, Eagle-Picher Co.

Here are two copies of the subject Operator's Monthly Report and Voucher for May 1953, as processed for payment, for your files.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments -2

cc: C. E. Dutton
Region V
Files
Day Files

Form MF-104 (Rev.)
(April 1952)

DEPARTMENT OF THE INTERIOR
Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

RECEIVED
JUN 26 1953
41

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1953 Docket No. DMEA 2399 Contract No. Idm 6939
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois
Contract Amount, $191,230.78 Government Participation 50 % Amount, $95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						6/29/53 J.W.A.
Drilling	2119.58	35614.11	37733.69	2119.58	35614.11	37733.69
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	411.00	8063.00	8474.00	411.00	8063.00	8474.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2530.58	43677.11	46207.69	2530.58	43677.11	46207.69

I certify that the above bill is correct and just and that payment therefor has not been received.
Date June 17, 1953 Payee The Eagle-Picher Co.
Per A C Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1265 29 #6

Signature L. A. Hill
(Authorized Certifying Officer)

Date JUN 23 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMEA 332 in accordance with the terms of the contract.

Signature H. J. Schaefer Title Mining Engineer Date 6/22/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature R. B. Wadham Title Ex Off Date 6/23/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED 41
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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1953 Docket No. DMEA 2399 Contract No. Idm D 339
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	Foot	2530.58	1332	46207.69	23660.5	1.953		
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2530.58		46207.69				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2530.58		46207.69				191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date June 17, 1953 Operator The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMSA CONTRACT - MAY, 1953

	Hole No.	Footage Drilled
Project #2		
Francis M. Calvert	17	197
"	18	180
"	19	185
"	20	200
"	21	197
"	22	188
"	23	185
Total Footage Drilled May		1332

Drilling Cost 1332 ft @ $1.565 per foot	$2,084.58
Plugging 7 holes @ $5.00	35.00
*Chief Geologist one month 7/14 of $425.00	212.50
*Field " " " 7/14 of $397.00	198.50
Total Cost month of May, 1953	$2,530.58

*14 holes used as a normal month for salaryoverhead

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

61

June 1st., 1953.

United States Department of Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled for the Eagle-Picher Company in LaFayette County, Wisconsin, during the month of May, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	17	Much marcasite and good blende mineralization in bottom 20 feet of Drab horizon and in Blue horizon. Average of blende assays from 140-160 feet depth- 5.31% ZnS, and from 170-187.5 feet depth- 5.92 % ZnS.
Francis M. Calvert,	18	Low grade marcasite mineralization and open ground in Gray horizon. Only traces of blende in Gray, Blue and Oil Rock horizons. Thin Oil Rock and Glass Rock horizons.
Francis M. Calvert,	19	Thin Oil Rock and Glass Rock horizons. Traces of galena from 20-60 feet depth. Some open ground in Drab & Gray horizons.
Francis M. Calvert,	20	Assays from 140 to 160 feet depth in Drab horizon average 3.28% ZnS and 10.97% FeS_2. Low grade blende and marcasite mineralization from 125 to 140 and 160 to 185 feet depth.

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	21	Rich blende and marcasite mineralization in Blue, Oil Rock & Glass Rock horizons. Blue horizon caved and salted hole from 192½ to 197 feet depth. (These assays will not be used). Assays from 175 to 192.5 feet depth average 17.01% ZnS and 35.50% FeS_2. Marcasite and low grade mineralization from 110 to 175 feet depth.
Francis M. Calvert,	22	Spotty low grade blende mineralization in Drab horizon from 95 to 150 feet depth. Blende mineralization in top of Gray from 150-157.5 feet depth. Average assay 10.76 % ZnS. This hole is on east edge of ore-body.
Francis M. Calvert,	23	Spotty low grade blende mineralization from 95 to 105 and 135 to 172.5 feet depth. Much open ground and most of drill cuttings lost in Gray and Blue horizons.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Month May 1953

Contract Idm E-339

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F.M. Calvert	17	5/ 1/53	5/ 5/53	197
" " "	18	5/ 6/53	5/ 8/53	180
" " "	19	5/ 9/53	5/12/53	185
" " "	20	5/12/53	5/15/53	200
" " "	21	5/15/53	5/19/53	197
" " "	22	5/20/53	5/22/53	188
" " "	23	5/25/53	5/28/53	185

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
None Reported				

TOTAL (completed)(~~accrued~~) footage this period 1,332 To date 23,660½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of June 17, 19 53, totalling $ 2530.58, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~xxxGeologistxx~~

W. A. Broughton
~~xxxMining Engineerxxxxx~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

~~Gaswold~~
Betty

June 4, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2399, Contract Idm E-339, Eagle-Picher Co. Operator's Monthly Report and Voucher for April 1953

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments - 2

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

JUN 3 1953 40

Month of April 1953 Docket No. DMEA 2399 Contract No. Idm & 339
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling	2878.22	32735.89	35614.11	2878.22	32735.89	35614.11
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	7241.00	8063.00	822.00	7241.00	8063.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase	** Adjusted March Totals			** Adjusted March Totals		
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Totals	3700.22	39976.89	43677.11	3700.22	39976.89	43677.11

I certify that the above bill is correct and just and that payment therefor has not been received.

Date May 28, 1953 *Payee The Eagle-Picher Co.

Per A C Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1850.11

Signature L. A. Hill
(Authorized Certifying Officer)

Date JUN - 3 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 6/1/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature D. B. Needham Title Ex Off Date 6/2/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

JUN 3 1953 40

Month of April 1953 Docket No. DMEA 2399 Contract No. Idn B 339
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	3700.22	1788	43677.11	22328.5	1.956		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3700.22		43677.11				191230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date May 28, 1953 Operator The Eagle-Picher Co.

Per A C Tompkins Title Plant Accountant
A. C. Tompkins

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

40

May 8th., 1953.

United States Department of the Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled for the Eagle-Picher Company in LaFayette County, Wisconsin, during the month of April, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Fred W. Wilkinson,	8	Hole loose and caved between 65 and 73 feet depth. Thick Oil Rock horizon. Fair marcasite mineralization in Glass Rock horizon.
Fred W. Wilkinson,	9	Thick Oil Rock horizon. Only traces of marcasite mineralization.
Fred W. Wilkinson,	10	Soft muddy hole, loose and open from 20 feet to bottom. Caved after 4 feet of Glass Rock horizon had been cut. Only traces of marcasite. Few coarse crystals of blende at 72½ - 75 feet depth. Oxidized to 67½ feet depth. This immediate area is loose and oxidized to Blue horizon. Mining would be very costly in this immediate area.
Fred W. and J. Frank Wilkinson,	3	This hole could not be drilled the required depth and No. 4 was drilled 3 feet north of number 3.
Fred W. and J. Frank Wilkinson,	4	Only traces of marcasite were found in the cuttings from this hole. Thick Oil Rock and Glass Rock horizons.

LEASE	DRILL HOLE NO.	REMARKS
Fred W. and J. Frank Wilkinson,	5	Thick Oil Rock horizon. Top of Gray horizon at 60-67½ feet depth averaged 2.02% ZnS.
Fred W. and J. Frank Wilkinson,	6	Oil Rock horizon from 102½ to 105 feet depth averaged 1.5% ZnS and 4.84% PbS. Much open ground throughout hole.
Fred W. and J. Frank Wilkinson,	7	Only traces of marcasite found in cuttings. Hole caved badly. Oxidation to top of Blue horizon. Due to deep oxidation and loose cavey ground drill rig was moved away from this immediate area.
Fred W. and J. Frank Wilkinson,	8	Zinc mineralization that averaged 6.48% blende was cut in the Oil Rock and Glass Rock horizons at 70 to 85 feet depth.
Fred W. and J. Frank Wilkinson,	9	This hole is 50 feet west of number 8. At 80 to 82½ feet depth 3.85% ZnS and 2.42% PbS was cut in the Clay Bed horizon. The hole caved badly while drilling the Glass Rock horizon.
Fred W. and J. Frank Wilkinson,	10	This hole is 50 feet east of number 8. Oxidation extends into Blue horizon. Only traces of marcasite and blende were found in the Oil Rock and Glass Rock horizons.
Fred W. and J. Frank Wilkinson,	11	Thick Oil Rock and Glass Rock horizons. Oxidized to bottom of Drab horizon and partly oxidized in Gray and Oil Rock horizons. Traces of marcasite and specks of galena and blende below Drab horizon.
Fred W. and J. Frank Wilkinson,	12	Thick Oil Rock horizon. Oxidized to bottom of Drab horizon. Traces of marcasite and traces of blende and galena below Drab horizon. This hole indicated that drill holes numbers 1 and 8 on Fred W. and J. Frank Wilkinson are on same mineralized trend. This trend is

LEASE	DRILL HOLE NO.	REMARKS
Fred W. and J. Frank Wilkinson,	12 (Con't)	narrow, low grade and the height is limited to near the top of the Gray horizon due to oxidation. Loose open ground along this trend would make costly mining.
Clarence P. Ralph,	5	Thick Oil Rock and Glass Rock horizons. Fair marcasite mineralization from 70 to 100 feet depth. Much open ground from 60 to 100 feet depth.
Francis M. Calvert,	15	Low grade marcasite and traces of blende and galena mineralization from 45 to 80 feet depth.
Francis M. Calvert,	16	Rich marcasite and fair blende mineralization in Oil Rock horizon from 185 to 195 feet depth- average of assays 4.49% ZnS and 21.20% FeS_2. Much open ground from 110 to 182½ feet depth.

16 holes

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Division.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Month April 1953

Contract Idm E-339

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
C. P. Ralph	5	4/23/53	4/24/53	152½
F. M. Calvert	15	4/25/53	4/28/53	176
" " "	16	4/28/53	4/30/53	205
F. W. Wilkinson	8	4/ 4/53	4/ 6/53	127½
" " "	9	4/ 6/53	4/ 7/53	117½
" " "	10	4/18/53	4/18/53	85
F.W. & J.F.Wilkinson	3	abandoned		--
" " " " " "	4	4/ 8/53	4/ 9/53	105
" " " " " "	5	4/10/53	4/10/53	110
" " " " " "	6	4/11/53	4/13/53	117½
" " " " " "	7	4/13/53	4/14/53	125
" " " " " "	8	4/14/53	4/15/53	90
" " " " " "	9	4/16/53	4/17/53	92
" " " " " "	10	4/17/53	4/17/53	85
" " " " " "	11	4/20/53	4/21/53	105
" " " " " "	12	4/21/53	4/22/53	95

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

None reported in progress.

TOTAL (completed) ~~(accrued)~~ footage this period 1788 To date 22,328½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of May 28, 19 53, totalling $ 3700.22, has been carefully checked and approved by me.

APPROVED BY:

F. J. Schroeder

Mining Engineer ~~or Geologist~~

W. A. Broughton

~~Mining Engineer or~~ Geologist

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT APRIL - 1953

	Hole No.	Footage Drilled	
Project No. 2			
Clarence P. Relph	5	152.5	
Francis M. Calvert	15	176	
"	16	205	
Total Project No. 2			533.5
PROJECT No. 3			
Fred W Wilkinson	8	127.5	
"	9	117.5	
"	10	85	
Fred W. & J. Frank Wilkinson	3	abandoned	
"	4	105	
"	5	110	
"	6	117.5	
"	7	125	
"	8	90	
"	9	92	
"	10	85	
"	11	105	
"	12	95	
Total Project No.3			1254.5
Total Footage drilled April			1788

Drilling Cost 1788 ft. @ $1.565 per foot	$2798.22
Plugging 16 holes @ $5.00	80.00
Chief Geologist one month	425.00
Field " one month	397.00
Total Cost month of April	$3700.22

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

~~Bob~~
~~Grunwald~~
Betty

5/5/53. Received by D.W.G.

April 28, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 30 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-2399, Contract Idm-E339, The Eagle-Picher Co. Operator's Monthly Report and Voucher for March 1953

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments

Form MF-124 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53
Defense Minerals Administration
RECEIVED
APR 30 1953 35

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March 1953 Docket No. DMEA 2399 Contract No. Idm 2 339
Operator's Name The Eagle-Picher Co.
Address Galena, Illinois Minerals Lead & Zinc
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) [redacted] Short Form } Contracts:	626.61	XX	32,735.89		XX	J.W.C. 5/6/53
Drilling		32,109.28		626.61	32,109.28	32,735.89
Bulldozing						
Crosscutting						
Drifting		XXAdjusted February totals			XXAdjusted February totals	
(2) Labor and Supervision:						
Labor						
Supervision	822.00	7,124.00	7,946.00	117.00		
Technical Services				822.00	7,124.00	7,946.00
(3) Operating Mat'ls. and Supplies:						
Timber				only 2 holes drilled		
Explosives						
Pipe						
Track				1/7 of salaries allowed		
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1448.61	39,233.28	40,681.89	743.61 1448.61	39,233.28	39,976.89 40,681.89

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 4/28/53 *Payee The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 371.80

Signature L. A. Hill
(Authorized Certifying Officer)

Date APR 27 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 4/23/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Ex Off Date 4/24/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 30 1953

35

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1953 Docket No. DMEA 2399 Contract No. Ida E 339
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	1440.61	394	40,661.09	20540.5	1.981		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1440.61		40,661.09				193,630.70

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date April 20, 1953 Operator The Eagle-Picher Co

Per A G Dompkins Title Plant Accountant

Remarks:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - MARCH, 1953

	Hole No.	Footage Drilled
Project #2		
Francie M. Calvert	14	254
Project #3		
Verna B. Cole(Tract #1)	16	140
Total footage drilled March		394

Drilling Cost 394 ft. @ $1.565	$ 616.61
Plugging 2 holes @ $5.00	10.00
Chief Geologist one month	425.00
Field " " "	397.00
	$1448.61

April 1st.,1953.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the respective drill holes that were drilled for the Eagle-Picher Company in LaFayette County, Wisconsin, during the month of March, 1953, under Defense Minerals Exploration Contract, Number Idm-E339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	14	This drill hole was very loose and open. No blende mineralization was noted and only a few traces of marcasite.
Verna B.Cole,	16	This was a solid hole with thick Oil Rock and Glass Rock beds. A few specks of galena were noted in the Drab horizon from 20 feet to 75 feet depth. Traces of marcasite were noted from 90 feet to 140 feet depth. This lease has been relinquished.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geolgist
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month March 1953

Contract Idm E 339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F.M. Calvert	14	2/26/53	3/ 5/53	254
V.B. Cole	16	3/ 3/53	3/ 5/53	140

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
		None Reported		

TOTAL (completed)(~~[illegible]~~) footage this period 394 To date 20,540½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of April 20, 19 53, totalling $ 1448.61, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Brewster
~~Mining Engineer or~~ Geologist

DRILL RECORD
The Eagle-Picher Company

HOLE NO. 14

Property Name: FRANCIS M. CALVERT
Began: 2-26-53 Finished: 3-5-53
Drill Owner: Swalley Estate
Drill Runner: Dave Taylor

DEPTH From	To	DESCRIPTION
0	15	Brown-buff clay
15	20	Buff dolomite, buff clay 75-25, limonite 8
20	30	Buff dolomite, brown clay 98-2, limonite 1
30	40	Coarse cuttings: buff dolomite, brown clay 99-1, trace limonite
40	50	Buff dolomite, few specks limonite
50	60	Buff dolomite, few specks limonite
60	70	Buff dolomite, few specks limonite
70	80	Buff dolomite
80	90	Buff dolomite
90	100	Dark buff dolomite
100	110	Dark buff dolomite, trace calcite
110	115	Buff & dark buff dolomite, dark buff & gray cave filling ½
115	120	Buff & dark buff dolomite
120	125	Buff & dark buff dolomite
125	130	Buff & dark buff dolomite
130	135	Buff dolomite, light brown chert 93-7 DRAB - 130
135	140	Coarse cuttings: Buff dolomite, brown chert 85-15
140	145	Coarse cuttings: Buff dolomite, brown & gray chert 90-10, a speck marcasite
145	150	Coarse cuttings: buff dolomite, brown chert 88-12
150	155	Coarse cuttings: Buff dolomite, brown chert 97-3
155	165	Coarse cuttings: Buff dolomite, brown & buff chert 91-9
165	175	Buff dolomite, brown & buff chert 92-8, trace gray clay
175	185	Dark buff dolomite, brown & tan chert 92-8
185	190	Buff & dark buff dolomite, tan chert 94-6, trace dark buff & gray clay
190	195	Dark buff dolomite, tan, brown & buff chert 96-4
195	200	Very small recovery: Buff dolomite, brown clay, brown chert 94-5-1
200	205	Gray-brown dolomite, dark buff dolomite, tan & brown chert 50-45-5, few specks marcasite
205	210	Buff dolomite, light brown-buff clay, dark gray clay 85-10-5, trace tan chert, few specks marcasite
210	215	Coarse cuttings: Buff dolomite & dark brown-buff cherty dolomite, trace tan chert, calcite 5
215	220	Brown-buff coarse-grained dolomite, tan chert 75-25, few specks marcasite
220	225	Coarse cuttings: Gray coarse-grained dolomite, tan & brown chert 60-40, few specks green shale, buff dolomitic ravellings 5, thin trace marcasite GRAY - 220
225	227½	Coarse cuttings: Gray coarse-grained dolomite, few specks green shale, trace marcasite, some buff dolomite & tan chert ravellings
227½	230	Coarse cuttings: Brown dolomite, tan & brown chert ravellings, buff dolomite ravellings 50-40-10, thin trace marcasite, a speck blende

Property Name: FRANCIS M. CALVERT

From	To	
230	232½	Coarse cuttings: gray-brown dolomite, tan chert, buff dolomite 70-20-10, thin trace marcasite
232½	235	Extra coarse cuttings: Brown dolomite, tan & brown chert, buff dolomite 50-47-3, few specks marcasite
235	237½	Coarse cuttings: gray-brown dolomite, tan & brown chert, buff dolomite, gray clay 60-30-8-2, thin trace marcasite BLUE - 235
237½	240	Extra coarse cuttings: gray-brown dolomite, tan chert, gray clay, buff dolomite 75-10-10-5, trace marcasite
240	242½	Coarse cuttings: Brown dolomite, tan chert, buff dolomite 60-20-20, all ravelling, few specks marcasite OILROCK - 240
242½	245	Ravellings from overlying beds, trace fossils, few specks marcasite
245	247½	Ravellings from overlying beds, green clay 60-30, few fossils, trace marcasite CLAY - 245
247½	250	Coarse cuttings: Ravellings from overlying beds, dark brown dolomite 50-50, trace marcasite
250	252½	Ravellings from overlying beds, brown dolomite & limestone 95-5, thin trace marcasite DRAG - 247½
252½	254	Ravellings from overlying beds, gray dolomitic limestone, brown limestone 57-33-10, few specks marcasite McGREGOR - 253½

Total depth measured 254.3 with steel tape
Water at 66'

Very loose, cavy hole.
No assays

Land Description: Southwest ¼ of Southeast ¼ of Sec. 6, Twnsp 41, North, Rng 1 East

Location of Hole: South 15° West 250' from Drill Hole #10

DRILL RECORD
The Eagle-Picher Company

HOLE NO. 16 (DNRA)

Property Name: VERNA E. COLE (Tract #1)
Began: 3-3-53 Finished: 3-5-53
Drill Owner: Thomas
Drill Runner: Ray Reavis

DEPTH From	To	DESCRIPTION
0	5	Black soil
5	10	Brown clay
10	15	Brown clay
15	20	Dark buff clay, few specks brown chert
20	25	Buff dolomite, buff clay, gray-brown chert 46-46-8, few specks galena
25	30	Buff dolomite, buff clay, gray-brown chert 60-37-3, few specks galena
30	35	Buff dolomite, buff clay, gray-brown chert 83-10-7
35	40	Buff dolomite, gray-brown & brown chert 92-8, few specks galena
40	50	Light buff dolomite, gray-brown chert 93-7, few specks galena
50	60	Light buff dolomite, gray-brown chert 98-2, few specks galena
60	70	Light buff dolomite, gray-brown chert 99-1, few specks galena
70	75	Buff dolomite, gray-brown & brown-buff chert 91-9, trace limonite, specks galena
75	80	Brown-buff dolomite, tan & gray-brown chert 60-40, few specks limonite & marcasite
80	85	Buff dolomite, Buffish-brown & tan chert 94-6, specks limonite
85	90	Brown-buff, tan & brown-buff chert 97-3, specks limonite
90	95	Gray dolomite, trace marcasite GRAY - 90
95	97½	Gray dolomite, thin trace marcasite
97½	100	Gray dolomite, few specks marcasite
100	102½	Gray dolomite, trace marcasite
102½	105	Gray dolomite, gray dark-speckled dolomite 80-20, trace marcasite SLIME - 104½
105	110	Dark gray dark-speckled dolomite, trace marcasite
110	112½	Dark gray dark-speckled dolomite, trace marcasite
112½	115	Brown dolomitic limestone, dark gray dark-speckled dolomite 80-20, trace marcasite
115	120	Brown dolomitic limestone, trace brown shale, trace calcite, marcasite 1/10
120	125	Brown dolomitic limestone, dark brown shaly limestone 98-2 trace marcasite, specks blende
125	127½	Gray-brown dark-speckled limestone, dark gray fossiliferous limestone, green shale 60-20-20, thin trace marcasite, few specks phosphate, CHERT - 126½
127½	130	Brown dolomitic limestone, dark gray fossiliferous limestone 80-20, trace calcite, trace marcasite GLASS - 128

(Continued on next page)

Property Name: VERNA B. COLE (Tract #1)

From	To	
130	132½	Dark brown dolomite, trace chocolate brown shale, trace marcasite
132½	135	Dark brown dolomite, trace chocolate brown shale, calcite 1, trace marcasite
135	137½	Gray dolomitic limestone, dark brown dolomite 60-40, chocolate brown shale 1, trace marcasite
137½	140	Gray dolomitic limestone, few specks marcasite

McGREGOR - 136

Total depth measured 140.4' with steel tape
Water 68'

Land Description: Northeast ¼ of Southeast ¼ of Sec. 31, Twnsp 2 North, Rng 1 East

Location of Hole: 100' North & 515' East from Drill Hole #1

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

~~Gibbs~~
Grimwold
Betty

April 2, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for February 1953 Docket DMEA-2399, Contract Idm E-339, The Eagle-Picher Co.

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments

Form MF 104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals
RECEIVED
APR 6 1953

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February 3 195 Docket No. DMEA 2399 Contract No. Idm R 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2891.36	29,253.72	32,145.08	2855.56	29,253.72	32,109.28
Bulldozing						
Crosscutting				*See Attached Expense Sheet		
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	6,302.00	7,124.00	822.00	6,302.00	7,124.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3713.36	35,555.72	39,269.08	3,677.56	35,555.72	39,233.28

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Mar 20, 1953 *Payee The Eagle-Picher Co.
Per A. G. Dumpling Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1838.78
Signature L. A. Hill
(Authorized Certifying Officer)
Date MAR 30 1953 Vou. No. 33
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 3/27/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title [illegible] Date 3/30/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April, 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1953 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name The Eagle-Picher Co. Minerals Lead-zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core		* 3677.56		39 233.28		1.947		
Churn	ft	~~3713.36~~	1789.5	~~39,269.08~~	20146.5			
Auger						~~1.949~~		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		3713.36		39,269.08				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3713.36		39,269.08				191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Mar. 20, 1953 Operator The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant
A. C. Tompkins

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

* See Attached Expense Sheet — [illegible]

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - FEBRUARY, 1953

	Hole No.	Footage drilled	
Project #1			
Henry C. Gray	21	279.5	
"	22	279.5	
Total Project #1			559
Project #2			
Francis M. Calvert	11	238	
"	12	190.5	
"	13	196.5	
Total Project #2			625
Project #3			
Fred W. Wilkinson	5	80	
"	6	115	
"	7	90.5	
Fred W. & J. Frank Wilkinson	2	111	
Total Project #3			396.5
Project #4			
Fred Heim	8	100.5	
"	9	108.5	
Total Project #4			209
Total Footage Drilled February			1789.5

Drilling Cost 1789.5 feet @ $1.565	~~$2836.36~~	* 2800.56
Plugging 11 holes @ $5.00	55.00	
Chief Geologist one month	425.00	
Field " " "	397.00	
Total cost month of February	~~$3713.36~~	3677.56

* Corrected - JEP apparently used $1.585 as unit cost - [illegible]

RHL File.

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

March 5th., 1953

United States Department of the Interior
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. MEEDHAM.

Gentlemen:

The following is our summary of the respective drill holes that were drilled for the Eagle-Picher Company in LaFayette County, Wisconsin, during the month of February, 1953, under Defense Minerals Exploration Contract, Number Idn- E339:

LEASE	DRILL HOLE NO.	REMARKS
Henry C. Gray,	21	This drill hole is on the trend of mineralization & cut good marcasite & calcite mineralization in the Oil Rock and Glass Rock horizons. No blende mineralization was noted.
Henry C. Gray,	22	This drill hole cut good marcasite mineralization with some calcite. The drilling on the Henry C. Gray lease indicates that the mineralized area is too low grade in blende to be mined profitably. The lease has been abandoned.
Francis M. Calvert,	11	Fair marcasite mineralization in lower part of Drab horizon from 200 to 215 feet depth. Hole loose & ravelled badly from 215 feet to 238 feet depth.
Francis M. Calvert,	12	Spotty marcasite mineralization from top of Drab horizon to top of McGregor horizon. Traces of blende in upper part of Drab horizon from 58 feet to 95 feet depth.

LEASE	DRILL HOLE NO.	REMARKS
Francis W. Calvert,	13	Very loose hole- ravelled badly. Spotty marcasite mineralization from 150 feet to 197.5 feet depth.
Fred W. Wilkinson,	5	Low grade marcasite mineralization in Blue horizon. Traces of blende in Oil Rock horizon.
Fred W. Wilkinson,	6	Hole loose & ravelled considerably. Gray horizon partly oxidized and contains low grade blende & much limonite.
Fred W. Wilkinson,	7	Rich marcasite mineralization from 65 feet to 90 feet. Hole oxidized to top of Gray horizon & contains much limonite. Drill holes 7 & 4 indicate mineralized trend too low grade in blende in immediate area.
Fred W. Wilkinson, & J.Frank Wilkinson,	2	Oxidized to 80 feet depth. Low grade blende mineralization from 65 feet to 105 feet depth. Good $ZnCO_3$ mineralization from 55 to 75 feet depth.
Fred Heim,	8	Good marcasite and calcite mineralization from top of Blue horizon at 67 feet to bottom of hole at 100 feet. Thick Oil Rock horizon.
Fred Heim,	9	Hole loose & ravelled considerably. Oxidized to 75 feet. Some calcite with marcasite & limonite from 45 feet to 75 feet depth. Drill holes 7, 8 & 9 have prospected mineralized trend & indicate weak trend of mineralization. This lease has been abandoned.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By.

J. F. Lyden,
Chief Geologist
Mining & Smelting Div.

JFL/tp.

WORK PROGRESS REPORT

Docket 2399 Month February 1953

Contract Idm-E339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
H.C. Gray	21	1/30/53	2/ 4/53	279½
" " "	22	2/10/53	2/14/53	279½
F.M. Calvert	11	2/ 3/53	2/10/53	238
" " "	12	2/10/53	2/14/53	190½
" " "	13	2/16/53	2/25/53	196½
F.W. Wilkinson	5	2/ 5/53	2/ 6/53	80
" " "	6	2/ 7/53	2/10/53	115
" " "	7	2/18/53	2/19/53	90½
F.W. & J.F. Wilkinson	2	2/12/53	2/14/53	111
F. Heim	8	2/23/53	2/24/53	100½
" "	9	2/26/53	2/27/53	108½

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
F.M. Calvert	14	2/26/53	130	

TOTAL (completed) ~~[illegible]~~ footage this period 1789½ To date 20,146½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of March 20, 19 53, totalling $3677.56, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer

W. A. Broughton
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 1 1953

March 30, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for January 1953
Docket DMEA-2399, Contract Idm-E339, The Eagle-Picher Co.

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments - 2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 1 1953

March 30, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for January 1953
Docket DMEA-2399, Contract Idm-E339, The Eagle-Picher Co.

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments - 2

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense
Budget Bureau No. 42-R1036.3.
Approval expires 1-31-53.
RECEIVED
APR 1 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January 1953 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Expense~~ Short Form Contracts:	454434		29253.72			
Drilling	$4547.46	$24709.38	$29256.84	$4,544.34	24,709.38	29,253.72
Bulldozing						
Crosscutting				*See Attached Expense Sheet		
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	5480.00	6302.00	822.00	5,480.00	6,302.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
	536634		35555.72			
TOTALS	$5369.46	$30189.38	$35,558.84	$5366.34	30,189.38	35,555.72

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Mar 5, 1953 *Payee The Eagle-Picher Co.
Per A G Tompkins Title Plant Accountant
A. G. Tompkins

*When a voucher is signed or receipted in behalf of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2683.17
Signature L. A. Hill
(Authorized Certifying Officer)
Date MAR 19 1953 Vou. No. 30
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 3/14/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature O. B. Needham Title Exc Off Date 3/19/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 1 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1953 Docket No. DMEA 2399 Contract No. Idm R 339

Operator's Name The Eagle-Picher Co. Minerals Lead Zinc

Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core		*5366.34	2859	35,555.72	18357			
Churn								
Auger	Foot	$5369.46	2861	$35,558.84	18359	1.937		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$5369.46		$35,558.84				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date March 5, 1953 Operator The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant

A. C. Tompkins

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

* See Attached Expense Sheet

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - JANUARY, 1953

	Hole No.	Footage drilled	
Project #1			
Henry C. Grey	15	282 280	
"	16	274.5	
"	17	275.5	
"	18	262.5	
"	19	237.5	
"	20	240.0	~~1572~~
Total project #1			1572 1570
Project# 2			
Calvert Estate (Tract #1)	39	208	
"	40	271.5	
~~Total project #2~~			
Francis M. Calvert	9	abandoned	
"	10	237.5	
Total Project #2			717
Project #3			
Calvert Estate (Tract #3)	21	138	
Clarence J. Busch	9	206.5	
"	10	95	
"	11	132.5	
Total Project #3			572
Total Footage Drilled January			2861 2859

Drilling Cost 2861 feet @ $1.565 (2859)	$4477.46	4474.34
Plugging 14 holes @ $5.00	70.00	
Chief Geologist one month	425.00	
Field " " "	397.00	
Total Cost month of January	$5369.46	5366.34

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

February 9, 1953.

United States Department of the Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is a summary of the respective drill holes that were drilled for The Eagle-Picher Company in Lafayette County, Wisconsin, during the month of January, 1953, under Defense Minerals Exploration Contract, Number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Calvert Estate, (Tract #1)	39	Marcasite mineralization in Blue & Oil Rock horizons. Much loose ground below 165 feet depth. This area which includes Drill holes 29 to 39 has been abandoned because the blende mineralization is too low grade and the drilling indicates loose caving ground that would make high cost mining.
Calvert Estate, (Tract #1)	40	Oil and Glass Rock beds thick & limy. This completes the drilling on Calvert Tr. # 1. Mineralized areas too small and low grade to make orebodies.
Calvert Estate, (Tract # 3)	21	This was a loose cavey hole that contained low grade marcasite mineralization in the Gray, Blue & Oil Rock horizons. This completes the drilling on Calvert-Tract #3. Mineralized areas too small and low grade & drilling indicates loose caving ground that would make high cost mining.
Francis M. Calvert,	9	Hole abandoned by driller at 145 feet because broken bit could not be fished out.

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	10	This hole is 6' from #9- good marcasite mineralization from 185 feet to 227½ feet depth. Hole extremely loose and caving to top of Oil Rock horizon which is unfavorable from a mining standpoint.
Clarence J. Busch,	9	Loose boulders from surface to 40 feet depth. Good marcasite mineralization 135-140 and 200-202½ feet depth.
Clarence J. Busch,	10	Hole was extremely loose and caved badly. This type of ground could not be mined profitably. When driller could not advance below 95 feet depth he was given permission to stop hole and move off the location.
Clarence J. Busch,	11	Loose hole with thin Oil & Glass Rock horizons. Only traces of marcasite mineralization.
Henry C. Gray,	15	Oil & Glass Rock horizons thick & limy. Only traces of marcasite.
Henry C. Gray,	16	Oil & Glass Rock horizons thick & limy. Only traces of marcasite mineralization.
Henry C. Gray,	17	Oil & Glass Rock horizons thick & limy. Only traces of marcasite mineralization. Openings at 190 to 195 and 230 to 232½ feet depth and strong flow of water indicated edge of zone where Oil Rock & Glass Rock horizons are thinned.
Henry C. Gray,	18	Good marcasite mineralization in Blue horizon. Hole loose and open from 190 to 247½ feet depth. Unfavorable from mining standpoint. Trend of mineralization easterly
Henry C. Gray,	19	Good marcasite mineralization from 160 to 227½ feet depth. Low grade blende mineralization from 220 to 230 feet depth. In same low grade trend of mineralization as drill holes 11 & 13.
Henry C. Gray,	20	Fair marcasite mineralization in Gray & Blue horizons. Low grade blende mineralization in Oil Rock horizon.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J.P.Lyden, Chief Geologist.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month January 1953

Contract Idm - E339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
H.C. Gray	15	1/ 3/53	1/ 8/53	280
" " "	16	1/ 8/53	1/13/53	274½
" " "	17	1/13/53	1/17/53	275½
" " "	18	1/17/53	1/22/53	262½
" " "	19	1/23/53	1/27/53	237½
" " "	20	1/27/53	1/30/53	240
Calvert Estate	39	12/29/52	1/14/53	208
" "	40	1/16/53	1/23/53	271½
F.M. Calvert	9	1/19/53	- - - - - - abandoned - - - -	
" " "	10	1/27/53	1/31/53	237½
Calvert Estate	21	1/24/53	1/30/53	138
C.J. Busch	9	12/31/52	1/10/53	206½
" " "	10	1/10/53	1/13/53	95
" " "	11	1/14/53	1/16/53	132½

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
H.C. Gray	21	1/30/53	110	

TOTAL (completed)(~~xxxxxxx~~) footage this period 2859 To date 18,357
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of March 5, 19 53, totalling $ 5366.34, has been carefully checked and approved by me.

APPROVED BY:

W. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 9 1953

~~GEE~~
~~Kathryn~~
Betty

February 6, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for December 1952 Docket DMEA-2399, Contract Idm-E339, The Eagle-Picher Co.

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments - 2

Form ME-101 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPORTATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Wash

OPERATOR'S MONTHLY REPORT AND VOUCHER

FEB 6 1953

Month of December, 1952 Docket No. DMEA 2399 Contract No. Idn B 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2888.61	21820.77	24709.38	2888.61	21,820.77	24,709.38
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	4658.00	5480.00	822.00	4,658.00	5,480.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3710.61	26478.77	30189.38	3710.61	26,478.77	30,189.38

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Jan. 23, 1953 *Payee The Eagle-Picher Co.
Per A G Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1855.3046
Signature L. A. Hill
(Authorized Certifying Officer)
Date FEB - 2 1953 Vou. No. 25
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 1-28-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature C. B. Woodhouse Title Ax Af Date FEB

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 195 2 Docket No. DMEA 2399 Contract No. Idm R 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	3710.61	1817	30189.38	15498	1.948		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3710.61		30189.38				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan 23, 1953 Operator The Eagle-Picher Co.

Per A G Tompkins Title Plant Accountant
A. G. Tompkins

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - DECEMBER, 1952

	Hole No.	Footage drilled	
Project #1			
John Oliver Gray	2	283	
Total Project #1			283
Project #2			
Calvert Estate Tract #1	36	221	
	37	230	
	38	211	
Total Project #2			662
Project #3			
William F. Snyder	5	130	
Clarence J. Busch	6	193	
" "	7	218	
" "	8	206	
Total Project #3			747
Project #4			
Fred Helm	3	125	
Total Project #4			125
Total Footage drilled - December			1817

Drilling Cost 1817 feet @ 1.565	$2843.61
Plugging 9 holes @ $5.00 each	45.00
Chief Geologist 1 month	425.00
Field Geologist 1 month	397.00
Total cost month of December, 1952	$ 3710.61

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

January 8, 1953.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR.A. B. NEEDHAM.

Gentlemen:

In our summary report on the respective drill holes that the Eagle-Picher Company finished drilling during the month of November, 1952, in Lafayette County, Wisconsin, under the Defense Minerals Exploration Contract, number Idm-E 339, drill hole number 3 on the Fred Heim lease was overlooked.

The following is a summary for this drill hole:-

LEASE	DRILL HOLE NO.	REMARKS.
Fred Heim,	3	High calcite in bottom of Drab and in Gray horizons. Beds higher structurally than in drill holes to northeast. Some more drilling will be necessary between drill holes number 3 and 7.

Yours very truly,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist
Mining & Smelting Div.

JPL/tp.

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

January 6, 1953.

United States Department of the Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following summary gives the details on the respective drill holes that were drilled for The Eagle-Picher Company in Lafayette County, Wisconsin, during the month of December, 1952, under the Defense Minerals Exploration Contract, Number Idm-E339:

LEASE	DRILL HOLE NO.	REMARKS.
Calvert Estate, (Tract # 1)	36	Good marcasite mineralization from 155 to 207½ feet depth. Low grade blende mineralization in Oil Rock horizon.
Calvert Estate, (Tract # 1)	37	Low grade blende mineralization with fair marcasite in Blue and Oil Rock horizons.
Calvert Estate, (Tract # 1)	38	Extremely loose formations throughout hole. Low grade galena mineralization 85 to 95 feet depth. Fair marcasite mineralization 165 to 211 feet depth.
William F. Snyder,	5	Loose barren hole oxidized to 105 feet. Unfavorable area.
Clarence J.Busch,	6	Low grade marcasite mineralization 115 to 170 feet depth. Little blende mineralization 115 to 120 feet depth. Oil and Glass Rock horizons thin.
Clarence J.Busch,	7	Fair marcasite mineralization from top of Drab horizon to top of Oil Rock horizon. Area to east favorable structure.

LEASE	DRILL HOLE NO.	REMARKS.
Clarence J.Busch,	8	Scattered marcasite mineralization from 125 to 206 feet. Oil Rock horizon thick. Favorable area to north.
John Oliver Gray,	2	No mineralization. Oil Rock and Glass Rock thick and limy. Unfavorable area.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month December 1952

Contract Idm-E 339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
J. O. Gray	2	12/15/52	12/19/52	283
Calvert Estate	36	11/22/52	12/ 3/52	221
" "	37	12/ 6/52	12/12/52	230
" "	38	12/15/52	12/27/52	211
W. F. Snyder	5	12/ 1/52	12/3 / 52	130
C. J. Busch	6	12/ 4/52	12/10/52	193
" " "	7	12/11/52	12/18/52	218
" " "	8	12/19/52	12/30/52	206
F. Heim	*3	10/30/52	11/ 1/52	125

* Drilled in November

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Calvert Estate	39	12/29/52	130	
C. J. Busch	9	12/31/52	20	

TOTAL (completed) ~~(accrued)~~ footage this period 1817 To date 15,498
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to-date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of January 23, 19 53, totalling $ 3710.61, has been carefully checked and approved by me.

APPROVED BY:

W. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer~~ or Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
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February 6, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for November 1952
Docket DMEA-2399, Contract Idm-E339, Eagle-Picher Co.

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments - 2

Form MR 104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval Expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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FEB 9 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1952 Docket No. DMEA 2399 Contract No. Idm 8 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois
Contract Amount, $191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2258.22	19562.55	21820.77	2258.22	19,562.55	21,820.77
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	3836.00	4658.00	822.00	3,836.00	4,658.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3080.22	23398.55	26478.77	3080.22	23,398.55	26,478.77

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Jan. 23, 1953 *Payee The Eagle-Picher Co.

Per A G Dompkins Title Plant Accountant
A. G. Dompkins

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1540.11 AG

Signature L. A. Hill
(Authorized Certifying Officer)

Date FEB - 2 1953 Vou. No. 25
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 1-28-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature O. B. Weatherson Title Ac Ex Off Date

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 9 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1952 Docket No. DMEA 2399 Contract No. Idm B 339

Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc

Address Colona, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Foot	3080.22	1611	26478.77	13661	1.939		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		3080.22		26478.77				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan 23, 1953 Operator The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant

A. C. Tompkins

Remarks:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING ON DMEA CONTRACT - NOVEMBER, 1952

	Hole No.	Footage drilled	
Project #2			
Calvert Estate Tract #1	33	203	
"	34	220	
"	35	215	~~638~~x
Total Footage Project #2			638
Project #3			
William F. Snyder	2	133	
" "	3	105	
" "	4	135	
Total Footage Project #3			373
Project #4			
Fred Heim	4	100	
	5	97.5	
	6	110	
	7	92.5	
Total Footage Project #4			400
Total Footage Drilled November			1411

Drilling Cost 1411 feet @ 1.565	$2208.22
Plugging 10 holes @ $5.00 each	50.00
Chief Geologist one month	425.00
Field Geologist one month	397.00
Total cost month of November, 1952	$3080.22

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

December 4, 1952.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is a summary giving the details on the respective drill holes that were drilled during the month of November, 1952, for the Assistance Contract DMEA- Eagle-Picher Company drilling in Lafayette County, Wisconsin:-

Lease	Drill hole Number	Remarks.
Calvert Estate (Tract # 1)	33	Extremely loose hole, soft formation to Oil Rock horizon. Few traces of marcasite & galena in lower horizons.
" "	34	Much marcasite in lower horizons- Blue to McGregor. Loose hole with soft formations. Hole on outer edge of area of mineralization.
" "	35	Low grade marcasite mineralization in Blue, Oil, and Glass Rock horizons. Loose hole with soft horizons to Oil Rock horizon. Hole on outer edge of area of mineralization.
Fred Heim,	4	Some calcite mineralization from 30 to 57½ feet depth in bottom of Drab and in Gray horizons. Few specks of galena in Oil Rock horizon. Hole in area where Oil Rock and Glass Rock horizons are thick and limy, and under these conditions are not generally favorable for commercial mineralization.

Lease.	Drill hole Number	Remarks.
Fred Heim,	5	Oil & Glass Rock horizons thick & limy. Few traces & specks of marcasite throughout hole. Few specks of blende in Glass Rock horizon. Unfavorable area for commercial mineralization in lower horizons- Gray to Glass Rock.
Fred Heim,	6	Traces and specks of marcasite throughout hole. Little calcite mineralization in lower horizons. Thick Oil Rock & Glass Rock horizons indicates area unfavorable to commercial mineralization in these horizons.
Fred Heim,	7	Marcasite & calcite mineralization from 35 to 85 feet depth- from bottom part of Drab horizon to top of Glass Rock horizons. Marcasite partly oxidized to limonite in Gray, Blue & Oil Rock horizons which indicates that if there is an orebody in the immediate area it may be partly or largely oxidized.
William F. Snyder,	2	Very loose hole, soft formations. Oxidized to top of Oil Rock horizon. Unfavorable [redacted] because of deep oxidation and soft ground.
William F. Snyder,	3	Extremely soft to top of McGregor. Traces of quartz & marcasite. Unfavorable area for mining because of soft ground.
William F. Snyder,	4	Traces of marcasite in Blue & Oil Rock horizons. No zinc mineralization.

Yours very truly,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Month November 1952

Contract Idm-E339

Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Calvert Estate	33	10/17/52	11/1/52	203
" "	34	11/ 3/52	11/11/52	220
" "	35	11/12/52	11/21/52	215
W. F. Snyder	2	11/14/52	11/18/52	133
" " "	3	11/19/52	11/21/52	105
" " "	4	11/21/52	11/24/52	135
F. Heim	4	11/ 1/52	11/ 4/52	100
" "	5	11/ 4/52	11/ 7/52	97½
" "	6	11/ 7/52	11/11/52	110
" "	7	11/11/52	11/13/52	92½

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Calvert Estate	36	11/22/52	150	

TOTAL (completed) ~~[illegible]~~ footage this period 1,411 To date 13,681
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of January 23, 19 53, totalling $ 3,000.22, has been carefully checked and approved by me.

APPROVED BY:

W. J. Schroeder
Mining Engineer~~ or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 9 1953

February 5, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for October 1952 Docket DMEA-2399, Contract-Idm E339, Eagle-Picher Co.

Here are two copies each of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments - 2

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 9 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October 1952 Docket No. DMEA 2399 Contract No. Idm 2 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois
Contract Amount, $191,230.78 Government Participation: 50 % Amount, $95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	4569.05	14993.50	19562.55	4569.05	14,993.50	19,562.55
Bulldozing		See attached schedule				
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	3014.00	3836.00	822.00	3,014.00	3,836.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5391.05	18007.50	23398.55	5391.05	18,007.50	23,398.55

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Jan. 23, 53 *Payee The Eagle-Picher Co.
Per A. C. Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2695.52
Signature L. A. Hill
(Authorized Certifying Officer)
Date FEB - 2 1953 Vou. No. 25
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-F339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 1-28-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature A B Woodhouse Title Ex Off Date FEB 3 1953

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 9 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195 2 Docket No. DMEA 2399 Contract No. Ian 8339
Operator's Name The Anglo-Pichor Co. Minerals Lead-Zinc
Address Galena, Illinois

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	5391.05	2401	23398.55	12270	1.907		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		5391.05		23398.55				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								$191,230.76

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan. 24, 1953 Operator The Anglo-Pichor Co.

Per A. C. Tompkins Title Plant Accountant

Remarks See supportin schedule for adjustment of costs to date

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

Supporting Schedule of Operator's Unit Cost and Progress Report
October, 1952
THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

* Note

ADJUSTMENT OF COSTS TO SEPTEMBER 30, 1952
per A. B. Needham letter 1/15/53 to A. C. Tompkins
Galena, Illinois

Costs to September 30, 1952		$18,763.06
Less amount deleted by you on September statement- 2915.5 Ft @ 23¢	$670.56	
Plugging holes September 17 holes @ $5.00 ea.	85.00	755.56
		$18,007.50

DRILLING ON DMEA CONTRACT - OCTOBER, 1952

	Hole No.	Footage drilled	
Project #2			
Calvert Estate Tract #1	31	218	
"	32	218	436
Total Footage Project #2			436
Project #3			
Calvert Estate Tract #3	20	160	
Verna B. Cole #2	14	128	
" "	15	133	
Henry V. Hinderman	4	148	
" "	5	142	
Vincent Pinch	3	73	
" "	4	105	
" "	5	156	
Arnold J. Splinter	2	148	
" "	3	144	
" "	4	134	
Bessie Wiseman	1	107	
"	2	138	
Total Footage Project #3			1716
Project #4			
Fred Heim	1	103	
"	2	146	
Total Footage Project #4			249
Total Footage Drilled October			2401

Drilling Cost- 2401 feet @ ~~$1.56~~ 1.565	$3,757.56
Plugging 17 holes @ $5.00 each	85.00
Chief Geologist salary 1 month	425.00
Field Geologist salary 1 month	397.00
	$4664.56
Plus adjusted footage cost to 9/30/52 9869 feet @ .065	641.49
Plus plugging 17 holes @ $5.00 September	85.00
	$5391.05

November 5, 1952.

United States Department of the Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.
ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following summary covers the details on the drill holes for the Assistance Contract DMEA- Eagle-Picher Company drilling in Lafayette County, Wisconsin, during the month of October, 1952:

LEASE	DRILL HOLE NO.	REMARKS.
Bessie Wiseman,	1	Some marcasite mineralization in bottom 15 feet of Drab horizon. Trace of galena in Oil Rock horizon. Oxidized 15' to 40' & ravelling some.
" "	2	Little marcasite & few specks of blende & galena in lower beds, glass rock dolomitized.
Henry V. Hinderman,	4	Loose ground to 46 feet. Hole barren.
" "	5.	Loose caving ground & oxidized to bottom of hole. Impossible to pick contacts exactly.
Verna B. Cole,	14	Loose caving round from 13' to 40'. Only traces of marcasite. Glass Rock horizon thinned to 2.4 feet thick.
" "	15	Coarse cuttings indicating open ground from 35' to 132.5 feet. Only a few specks of marcasite mineralization.
Vincent Finch,	3	Barren hole. Thick limy Oil Rock & Glass Rock horizons

LEASE	DRILL HOLE NO.	REMARKS.
Vincent Pinch,	4	Rich marcasite mineralization from 75' to 105'. Ore holes indicated on U.S.G.S. map 200 feet east of this location.
" "	5	Thick limy Oil Rock & Glass Rock horizons. Little marcasite mineralization in Gray and Glass Rock horizons.
Calvert Estate, Tract # 1,	31	Ore in Blue and Oil Rock horizons. Oil Rock very soft.
" " Tract # 1,	32	Ore in Blue and Oil Rock horizons. Rich marcasite mineralization from 170 to 207½ feet.
" " Tract # 3,	20	Loose ground. Caved badly.
Arnold J. Splinter,	2	Hole soft oxidized down to Clay bed. Caved & filled up 30 feet after drilling from 147½ - 150 feet.
" "	3	Hole loose and caved badly from 112½-140 feet. Oxidized to 130 feet.
" "	4	Thin Oil Rock & Glass Rock horizons. Hole barren.
Fred Heim,	1	Hard barren hole.
" "	2	Thick Oil Rock & Glass Rock horizon. Traces of marcasite throughout hole.

Yours very truly,

THE EAGLE-PICHER COMPANY.

BY. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Contract Idm E-339

Month October 1952

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Calvert Estate, (Tract 1)	31	10/ 2/52	10/ 7/52	218
" " " "	32	10/ 9/52	10/16/52	218
Calvert Estate, (Tract 3)	20	10/17/52	10/20/52	160
V. B. Cole	14	10/ 6/52	10/ 9/52	128
" " "	15	10/10/52	10/11/52	133
H. V. Hinderman	4	9/26/52	10/ 2/52	148
" " "	5	10/ 2/52	10/ 4/52	142
V. Pinch	3	10/ 7/52	10/ 9/52	73
" "	4	10/10/52	10/13/52	105
" "	5	10/13/52	10/17/52	156
A. J. Splinter	2	10/13/52	10/17/52	148
" " "	3	10/18/52	10/22/52	144
" " "	4	10/23/52	10/25/52	134
B. Wiseman	1	10/ 1/52	10/ 2/52	107
" "	2	10/ 3/52	10/ 6/52	138
F. Heim	1	10/22/52	10/24/52	103
" "	2	10/25/52	10/30/52	146

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Calvert Estate	33	10/17/52	165	
F. Heim	3	10/30/52	110	

TOTAL (completed) ~~(accumulated)~~ footage this period 2401 To date 12,270
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of January 23, 1953, totalling $5391.05, has been carefully checked and approved by me.

APPROVED BY:

K. J. Schroeder
Mining Engineer ~~Geologist~~

W. A. Broughton
~~Mining Engineer~~ Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1953

January 20, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Report and Voucher for September 1952
Docket DMEA 2399x, Contract Idm-E339
The Eagle-Picher Company

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham

A. B. Needham
Executive Officer
Field Team, Region V

Attachments

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September 195 2 Docket No. DMEA 23992 Contract No. Idm E 339
Operator's Name The Eagle-Picher Co. Minerals Lead&Zinc
Address Galena, Illinois
Contract Amount, $ 184,038.00 Government Participation: 50 % Amount, $ 92,019.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:				3994.50		
Drilling	4691.99	11,057.07	15,749.06	*4567.04	11,057.07	15,624.11
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	2,192.00	3,014.00	822.00	2,192.00	3,014.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5513.99	13,249.07	18,763.06	5389.04	13,249.07	18,638.11

*In accordance to telephone conversation of 10/27/52 with Needham advising Amendment No. 1 will be revised to $1.715 per foot.

Disp. a/c diff in rate - 58.07 on Dry Voucher # 12
572.54 this Voucher
630.61

RECEIVED NOV 3 1952 BUREAU OF MINES MINING DIV.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Oct. 16, 1952 *Payee The Eagle-Picher Co.
Per A. G. Zumpkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.--Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2379.21 AG
Signature L. A. Hill
(Authorized Certifying Officer)
Date DEC 23 1952 Vou. No. 21
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engr. Date 10/31/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Ex. Off. Date NOV [illegible]

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1952 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name Minerals Lead-Zinc
Address

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: ~~Core~~		*5389.04		18,638.11		1.889		
Churn	Foot	5513.99	2663	18,763.06	9869	1.901		
~~Auger~~								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		5513.99		18,763.06				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								$154,038.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct. 16, 1962 Operator THE EAGLE-PICHER CO.

Per A. O. Tompkins Title Plant Accountant
A. O. Tompkins

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

*As Approved.

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

DRILLING ON DMEA CONTRACT - SEPTEMBER, 1952

	Hole No.	Footage drilled	
Project #1			
R. F. Houtakker	2	241.5	
	4	243.	
Total Footage Project #1		484.5	484.5
Project #2			
Calbert Estate	28	215.	
"	29	214.	
"	30	197.5	
Total Footage Project #2		626.5	626.5
Project #3			
Fred W. Wilkinson	1	135	
"	2	112.5	
"	3	142.5	
"	4	82.5	
Delmar Heim	1	136.	
"	2	137.5	
"	3	122.5	
Henry V. Hinderman	1	135.5	
"	3	147	
Fred W & J.Frank Wilkinson	1	115.	
Vincent Pinch	1	146.	
"	2	140.	
Total Footage Project #3		2MM	1552.
TOTAL FOOTAGE DRILLED SEPTEMBER - - - - - -			2663.

Drilling Cost 2663 ft. @ $1.73	$4,606.99
Plugging 17 holes @ $5.00 each	85.00
Chief Geologist salary 1 month	425.00
Field Geologist salary 1 month	397.00
Totalcost month of September, 1952	$5513.99

October 6, 1952.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.
ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following are the summaries for the Assistance Contract DMEA- Eagle-Picher Company drilling for September, 1952, in Lafayette County, Wisconsin:-

LEASE	DRILL HOLE NO.	REMARKS.
Calvert Estate, Tract # 1.	28	Thin Oil and Glass Rock horizons. Trace of galena in top of Drab horizon and trace of blende in Oil Rock horizon.
Calvert Estate, Tract # 1.	29	3.82% blende from 197½-210 feet in bottom 2½ feet of Oil Rock and in Glass Rock. Low grade blende mineralization 175-197½ in Gray horizon and top 7½ feet of Oil Rock horizon.
Calvert Estate, Tract # 1.	30	Strong marcasite mineralization and trace of blende in Blue and Oil Rock horizons. Loose caving ground in Gray to McGregor.
Fred W.Wilkinson Lease,	1	No mineralization. Hard hole. Unfavorable area.
" " "	2	Few specks of blende in Gray horizon.
" " "	3	Trace of Blende in Oil Rock Horizon.
" " "	4	Rich marcasite mineralization from 25 to 75 feet. Low grade blende mineralization in Blue and Oil Rock horizons. Favorable area.
Fred W. & J.Frank Wilkinson lease,	1	Marcasite and low grade blende mineralization in Oil Rock horizon. Favorable area.
Delmar J.Heim,	1	Trace of marcasite mineralization in lower horizons.
" " "	2	Marcasite mineralization in Glass Rock horizon.

LEASE	DRILL HOLE NO.	REMARKS
Delmar J.Heim,	3	Traces of marcasite mineralization throughout hole.
Raymond F.Houtaker lease,	2	Hard hole. Area unfavorable.
" " "	3	Water well not in area included in DMEA contract.
" " "	4	Hard hole. Area unfavorable.
Vincent Finch Lease,	1	Rich marcasite mineralization from 65 feet to 145 feet.
" "	2	Trace of galena in Oil Rock horizon.
Henry V.Hinderman Lease,	1	This hole should have been included in our June-July report. It was drilled during the period July 26 to 28, 1952. It was a barren hole showing only a few specks of marcasite.
" " "	2	This hole was abandoned by driller and No.3 was drilled in place of it.
" " "	3	Loose barren hole with only a few specks of marcasite.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month September 1952

Contract Idm E-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
R.F. Houtakker	2	9/4/52	9/9/52	241½
	4	9/15/52	9/18/52	243
Calvert Estate	28	8/27/52	9/ 2/52	215
	29	9/ 3/52	9/13/52	214
	30	9/17/52	9/22/52	197½
F.W. Wilkinson	1	9/ 1/52	9/ 4/52	135
	2	9/12/52	9/15/52	112½
	3	9/15/52	9/18/52	142½
	4	9/19/52	9/19/52	82½
Delmar Heim	1	9/ 4/52	9/ 6/52	136
	2	9/ 8/52	9/ 9/52	137½
	3	9/10/52	9/12/52	122½
H.V. Hinderman	1	6/26/52	6/28/52	135½
" " "	3	9/20/52	9/25/52	147
F.W. & J.F. Wilkinson	1	9/22/52	9/23/52	115
V. Pinch	1	9/24/52	9/26/52	146
" "	2	9/26/52	9/30/52	140

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
H.V. Hinderman	4	9/26/52	105	

TOTAL (completed)(~~accrued~~) footage this period 2663 To date 9869
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of October 16, 19 52, totalling $ 5389.04, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Approved Bureau No. 42-R0313.
Approval expires 6-30-53.
RECEIVED
OCT 6 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1952 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead - Zinc
Address GALENA, ILLINOIS
Contract Amount, $184,038.00 Government Participation: 50% Amount, $92,019.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3868.32	7188.75	11057.07	3868.32	7188.75	11057.07
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	1370.00	2192.00	822.00	1370.00	2192.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4690.32	8558.75	13249.07	4690.32	8558.75	132[illegible]

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Sept. 16, 1952 *Payee The Eagle-Picher Co.

Per L C Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, that this account is correct and prope[illegible] ment in the amount of:

$ 2345.[illegible]

Signature L. A. Hel[illegible]
(Authorized Certifying

Date OCT - 2 1952 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm 1-339 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 9/25/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title [illegible] Date 10/2/52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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OCT 6 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1952 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead - Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	FT.	4690.32	2493.5	13249.07	7206	1.839		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		4690.32		13249.07				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4690.32		13249.07				184038.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 16, 1952 Operator The Eagle-Picher Co.

Per A C Tompkins Title Plant Accountant

REMARKS: Costs authorized by contract are $1.50 per foot of drilling to Aug. 27, then by amendment $1.73 per foot, plus $5.00 per hole for plugging and chief geologist and field geologist salaries totalling $822.00 per month

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
GALENA, ILLINOIS

Drilling on DMEA Contract for month of August, 1952

	HoleNo.	Footage Drilled 8/1 to 8/26	Footage Drille 8/27 to 8/31
Project No. 1			
Raymond F. Houtakker	1	275	
Totalfeet		275	
Project No. 2			
Calvert Estate	26	202.5	
"	27	184	30
Clarence P. Ralph	1	162.5	
"	2	167.5	
"	3	183.5	
"	4	220	
Francis M. Calvert	7	156	
"	8	80	95
Total feet		1356	125
Project No. 3			
Calvert Estate	16	148.5	
"	17	175	
"	18	131.5	
"	19	155	
Verna B. Cole	13		127.5
Total feet		610	127.5

Total footage drilled to Aug. 27, 1952	2241 ft.
" " " 8/27 to 8/31	252.5 ft.
Grand total	2493.5 ft.

Drilling Cost	2241 ft. @ 1.50 per foot	$3361.50
	252.5 @ 1.73 per foot	436.82
Plugging Holes	14 holes @ $5.00 per hole	70.00
	Total drilling cost	$3868.32
Chief Geologist	1 month @ $425.00	425.00
Field Geologist	1 month @ $397.00	397.00
	Total Technical Cost	$ 822.00
	GRAND TOTAL COST for period	$4690.32

September 9,1952

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.
ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following summaries cover the Assistance Contract DMEA- Eagle-Picher Company drilling for August, 1952, Lafayette County, Wisconsin:

LEASE	DRILL HOLE NO.	REMARKS.
Calvert Estate, Tract # 1,	26	Structure drilling. Hole near west edge of thinned Oil & Glass Rock horizons. Hole soft & caving from 155'- 191' .
" "	27	Structure drilling. Oxidized from [illegible]' to 170'- Open & strong water 175-180' & 205-210'.
Calvert Estate- Tract # 3,	16	Thick Oil & Glass Rock horizons. No mineralization.
" "	17	All oxidized to 140' . Marcasite partly oxidized in Oil & Glass Rock horizons. Weak blende mineralization in Glass Rock & top of McGregor horizons.
" "	18	Hard. Thick Oil & Glass Rock horizons. No mineralization.
" "	19	Soft & oxidized to top of Oil Rock horizon.
Frances M. Calvert,	7	Thin Oil & Glass Rock horizons. Low grade marcasite mineralization in Drab horizon.
" "	8	Thick Oil & Glass Rock horizons. Low grade oxidized marcasite mineralization in Drab horizon.
Verna B.Cole- Tract # 1,	13	Thin Oil & Glass Rock horizons. No mineralization.

LEASE	DRILL HOLE NO.	REMARKS.
Raymond F. Houtakker,	1	Thick Oil & Glass Rock horizons. No mineralization.
Clarence P. Ralph,	1	Low grade marcasite in Gray, Blue & Oil Rock horizons. Thin Oil & Glass Rock horizons.
" "	2	Thick Oil & Glass Rock horizons. Low grade marcasite oxidized in Drab & Gray horizons. No blende.
" "	3	Oil & Glass Rock horizons relatively thick. Traces of marcasite throughout hole. No Blende.
" "	4	Very thin Oil & Glass Rock horizons-loose ground 155-165'. Traces of marcasite throughout hole.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month August 1952

Contract Idn E-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
R. F. Houtakker	1	7/28/52	8/ 4/52	275
Project No. 2:				
Calvert Estate	26	8/13/52	8/18/52	202½
" "	27	8/21/52	8/27/52	214
C. P. Ralph	1	8/ 5/52	8/ 7/52	162½
" "	2	8/ 8/52	8/12/52	167½
" "	3	8/13/52	8/18/52	183½
" "	4	8/18/52	8/23/52	220
F. M. Calvert	7	7/30/52	8/4 /52	156
" "	8	8/25/52	8/28/52	175
Project No. 3:				
Calvert Estate	16	7/29/52	8/ 1/52	148½
" "	17	8/ 2/52	8/ 6/52	175
" "	18	8/ 7/52	8/ 9/52	131½
" "	19	8/11/52	8/13/52	155
V. B. Cole	13	8/29/52	8/30/52	127½

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Not reported				

TOTAL (completed)(~~accumul~~) footage this period 2,493½ To date 7,206
scratch one

All work was performed in a satisfactory manner and the attached Form MF -104, Monthly Report, constituting certified invoice, rendered by the contractor under date of September 16, 19 52, totalling $ 4,690.32, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder

H. J. Schroeder, Mining Engineer

W. A. Broughton

W. A. Broughton, Geologist

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Budget Bureau No. 42-R036.3.
Approval expires 6-30-53.
RECEIVED
OCT 6 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June 11 to July 31 1952 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead-Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 184,038.00 Government Participation: 50 % Amount, $ 92,019.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	7188.75	none	$ 7188.75	7188.75	None	7188.75
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	1370.00	none	$ 1370.00	1370.00	None	1370.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	8558.75	none	$ 8558.75	$8558.75	None	$8558.75

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Sept. 16, 1952 Payee The Eagle-Picher Co.
Per A. G. Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 4279.37
Signature L. A. Hill
(Authorized Certifying Officer)
Date OCT - 2 1952 Vou. No. 12
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm M-339 in accordance with the terms of the contract.

Signature W. J. Schroeder Title Mining Engineer Date 9/25/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature C B Needham Title Ex Off Date 9/26/52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval Expires 6-30-53

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 11 to July 31 1952 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead - Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	FT.	8558.75	4712.5	$8558.75	4712.5	1.816		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		8558.75		8558.75				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		8558.75		8558.75				$184,038.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 16, 1952 Operator The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant

REMARKS: Costs authorized by contract are $1.50 per foot of drilling plus $5.00 per hole for plugging; and chief geologist and field geologist salaries totalling $822.00 per mo.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
GALENA, ILLINOIS
Drilling on DMEA Contract June 11 to July 31, 1952

	Hole No.	Depth
Project No. 1		
Henry C. Gray	10	290
"	11	265
"	12	281
"	13	270
"	14	286
John O.Gray	1	245
	Total feet	1637
Project No. 2		
Calvert Estate	2	161
"	3	175
"	4	195
"	5	185
"	24	240
"	25	225
Frances M. Calvert	4	245
"	5	248
"	6	183
	Total feet	1857
Project No. 3		
Verna B. Cole	5	125
"	6	132.5
"	7	130
"	8	132.5
"	9	131
"	10	137.5
"	11	132.5
"	12	137.5
Calvert Estate	15	160
	Total feet	1218.5
	GRAND TOTAL FOOTAGE DRILLED	4712.5 Ft.

Drilling Cost 4712.5 ft. @ 1.50 per foot	$ 7068.75
Plugging Holes 24 holes @$5.00 per hole	120.00
Total Drilling cost	$ 7188.75
Chief Geologist 1 2/3 months @ $425.00	708.33
Field Geologist 1 2/3 months @ $397.00	661.67
Total Technical Cost	$ 1370.00
GRAND TOTAL COST for period	$ 8558.75

September 9,'52.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.
ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following summaries cover the Assistance Contract DMEA- Eagle-Picher Company drilling for the period of June 11, 1952 to July 31, 1952, Lafayette County, Wisconsin.

LEASE	DRILL HOLE NO.	REMARKS.
Calvert Estate- Tract # 1,	24	No mineralization. Area to west unfavorable.
" "	25	Thin galena & blende mineralization in top of Drab horizon 90'-100' . Open ground in Gray horizon 185'- 195' .
Calvert Estate- Tract # 2,	2	No mineralization. Area to west unfavorable.
" "	3	No mineralization. Area to west unfavorable.
" "	4	Oxidized to top of Blue horizon.
" "	5	Oxidized 0-130' & 152½-172½. Main ore horizons oxidized.
Calvert Estate- Tract # 3,	15	Main ore horizons thick, limy and unmineralized.
Francis M.Clavert,	4	Low grade blende mineralization 212½-222½. Favorable area.
" "	5	This Oil & Glass Rock horizons. Traces of blende and galena.
" "	6	Thin Oil and Glass Rock horizons. Blende traces in Blue & Oil horizons. Favorable area.
Verna B. Cole- Tract # 1,	9	Thin Oil and Glass Rock horizons- oxidized.
" "	10	Thick Oil and Glass Rock horizons- no mineralization- unfavorable.

LEASE	DRILL HOLE NO.	REMARKS.
Verna B. Cole-Tract # 2,	5	Trace of blende in Oil Rock. Structure drilling.
" "	6	Marcasite oxidized in Oil & Glass Rock horizons. Structure drilling.
" "	7	Marcasite oxidized in Oil & Glass Rock horizons. Structure drilling.
" "	8	Thin Oil & Glass Rock horizons- trace of marcasite mineralization. Structure drilling.
" "	11	Thin Oil & Glass Rock horizons- trace of marcasite mineralization. Marcasite oxidized to top of Oil Rock. Structure drilling.
" "	12	Much open ground. No Mineralization. Structure drilling.
Henry C. Gray,	10	Thick Oil & Glass Rock horizons. Beds unmineralized.
" "	11	Thin Oil & Glass Rock horizons. Low grade blende mineralization. Structure drilling.
" "	12	Low grade blende mineralization. Hole near west edge of north-south low-grade mineralized trend. Structure drilling.
" "	13	Low grade blende mineralization. Hole at east edge of north-south mineralized trend. Structure drilling.
" "	14	Thick Oil & Glass Rock horizons. Beds unmineralized.
John O. Gray,	1	Thick Oil & Glass Rock horizons. Traces of marcasite throughout hole.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month June - July 1952

Contract Idm E-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Project No. 1:				
Henry C. Gray	10	6/12/52	6/18/52	290
" " "	11	6/23/52	6/27/52	265
" " "	12	6/27/52	7/ 3/52	281
" " "	13	7/ 3/52	7/11/52	270
" " "	14	7/12/52	7/19/52	286
John O. Gray	1	7/21/52	7/26/52	245
Project No. 2:				
Calvert Estate	2	6/13/52	6/19/52	161
" "	3	6/20/52	6/26/52	175
" "	4	6/27/52	7/ 1/52	195
" "	5	7/ 2/52	7/11/52	185
" "	24	7/12/52	7/19/52	240
" "	25	7/21/52	7/24/52	225
F. M. Calvert	4	7/11/52	7/18/52	245
" " "	5	7/21/52	7/25/52	248
" " "	6	7/25/52	7/30/52	183
Project No. 3:				
V. B. Cole	5	6/13/52	6/16/52	125
" " "	6	6/16/52	6/18/52	132½
" " "	7	6/18/52	6/23/52	130
" " "	8	6/24/52	6/26/52	132½
" " "	9	6/30/52	7 /1/52	131
" " "	10	7/ 2/52	7/ 3/52	137½
" " "	11	7/ 5/52	7/ 8/52	132½
" " "	12	7/ 8/52	7/10/52	137½
Calvert Estate	15	7/25/52	7/29/52	160

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
R. F. Houtekker	1	7/28/52	155	
F. M. Calvert	7	7/30/52	70	
Calvert Estate	16	7/29/52	125	

TOTAL (completed)(~~[illegible]~~) footage this period 4,712½ to date 4,712½
Scratch one

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of September 16, 19 52, totalling $ 8,558.75, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder

Harold J. Schroeder, Mining Engineer

W. A. Broughton

W. A. Broughton, Geologist